Knowledge Management in Policing

Enforcing Law on Criminal Business Enterprises

Petter Gottschalk

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Contents

Foreword

This book offers new insights to the understanding of organized crime based on the enterprise paradigm and the theory of profit-driven crimes. It will be a source of debate and inspiration for those in law enforcement and academia in this area. It makes a contribution to intelligence-led and knowledge-based policing, an emerging area of interest that builds upon and enhances policing as knowledge work, police officers as knowledge workers, and police forces as knowledge organizations.

This book offers practitioners and academics alike new thinking on understanding the business operation of organized crime, to better to be able to detect and disrupt organized criminal enterprises. Police all over the world are struggling with the combat against criminal organizations with varying success. The core idea behind this book—implementing intelligence strategy for policing criminal business enterprises—should certainly be appealing.

The primary intended audience for this book is academics and the increasing group of specialist law enforcement personnel engaged in tackling organized crime. There are a growing number of serious crime analysts who are now employed by forces and agencies. Law enforcement officers (police, customs, etc.) working in criminal investigative departments (senior investigative officers, analysts, heads of CID) are expected to be interested. The market for this book includes academics and practitioners in criminology, police studies, intelligence studies, and the criminal justice sector. And, one would like to think, advisors to policymakers in government departments with a responsibility for tacking organized crime as well.

Specifically in terms of the potential student market, this book should be of interest to students of policing, criminology, and intelligence courses, as well as to all students aiming to work in criminal investigative departments. However, both knowledge management and crime-combating strategies are usually not subjects taught during initial police training. Therefore, this book is likely to be of value to the advanced policing students market. For those that study policing from an academic level, this title would likely be useful as well. In some leading police academies and university colleges around the world, this book can be used as an undergraduate text as well.

But such is the subject matter of the book that the potential market is much wider than the student market and the investigator market. For example, among the various types of readers expected for this book, business courses should be explored. Faculty members in business schools responsible for business courses may be looking for new ways of teaching business by presenting the alternative of business of crime. Also, the topic of strategy implementation is important in most business courses.

This book is considered to be a much needed and original overview of the boundary between "legal" and "illegal" entrepreneurship, which makes it a critical challenge for policing criminal business enterprises. The language and concepts of business and management are applied in discussing the structures and processes of illegal entrepreneurial activities and how law enforcement can respond to this challenge. The book defines organized crime as the main challenge and discusses the role of entrepreneurs in illegal business that is criminal in nature.

This book will appeal to a wide variety of readers interested in new perspectives on policing criminal business enterprises. The text is clearly structured and systematically explores the basics of organized crime as an entrepreneurial business enterprise activity. The book draws upon several theoretical strands including organizational, sociological, managerial, historical, and practical perspectives in providing an insight into organized crime activity and police knowledge management.

Introduction

We all know names of business enterprises such as IBM, Fiat, Elf, Siemens, Ericsson, Nokia, Sony, Heineken, Ikea, Microsoft, Kia, Nike, and Virgin. These names belong to corporations producing goods and services. We may find the headquarters of IBM in the USA, Fiat in Italy, Elf in France, Siemens in Germany, Ericsson in Sweden, Nokia in Finland, Sony in Japan, Heineken in the Netherlands, and so forth. These are multinational or global business enterprises employing thousands of persons. The case is always that an entrepreneur has started the business a long time ago. In IBM, the first entrepreneur was Herman Hollerith who founded the business, and the second entrepreneur was Thomas J. Watson who grew the business. Fiat was founded by a group of investors including Giovanni Agnelli. Other famous entrepreneurs include Bill Gates (Microsoft), Ingvar Kamprad (Ikea), and Richard Branson (Virgin).

Similarly, we can identify criminal business enterprises such as Hells Angels, Cosa Nostra, Camorra, Yakuza, Adams Group, Warren Group, Sinaloa Cartel, Tijuana Cartel, Carli Cartel, Medellin Cartel, N'drangheta, Sacra Corona Unita, Verhagen, Favelas, Primeiro Commando da Capital, Aryan Brotherhood, Fuk Ching, Mara Salvatrucha, Bandidos, Coffin Cheaters, Commando Vermelho, Tarceiro Comando, Asia World Company, Ahmidan Group, Bout Group, Karzai Group, McGraw Group, Heavenly Alliance, Outlaws, Marcos Group, Afragola, Dalnevostochny, Uralmashski, Solntsevo, Chechen, Tambov, Podolsk, and Holleeder Group.

Cosa Nostra is a Sicilian confederation of more than one hundred Mafia groups. Hells Angels Motorcycle Club (HAMC) was formed in 1948 in Fontana, Calif, USA. It is not easy to identify an entrepreneur or the chief executive officer (CEO) in criminal organizations, but here are some examples.

- *Terry Adams* is head of the Adams family that is maybe the most feared criminal organization in England. The Adams family went into narcotics in the 1980s. There was a large demand for cocaine, cannabis, and ecstasy at that time. The family built a network to Colombian cocaine cartels. The family governs by means of violence. According to the police, the family is responsible for 30 murders (http://www.gangsterinc.tripod.com/).

- *Jamal Ahmidan* was doing well in the narcotics trade. He was caught and put in jail, where he converted to Islam. When he was released from prison, he had planned for terror attacks together with other inmates. To finance the intended terrorism, he continued to head the narcotics trade. At the same time he planned the train station explosions in Madrid. With money from drug dealing he bought explosive material, which was used in the subway system in Madrid. Hence, Ahmidan was involved in both criminal business and terrorism [138]. In the morning of March 11, 2004, the terror bombing hit commuter trains destined for Madrid. 191 people were killed and 1460 were injured. The attack was carried out by an Islamic group. The attack consisted of a co-ordinated series of ten explosions onboard four commuter trains in the rush hour. A total of thirteen bombs were placed, but three did not explode.

- *Victor Bout* is claimed to be the world's largest weapons dealer. He was born in Tajikistan. He has Russian military training and speaks six languages fluently. He has supplied Afghan groups with weapons and ammunition. His headquarter is in the Arab Emirates, first in Sharjah and later in Ajman. In the summer of 2004, one of Bout's transport planes landed in Liberia, containing helicopters, armored vehicles, and firearms (http://www.gangsterinc.tripod.com/).

- *Edoardo Contini* is chief executive of the Camorra Mafia in Naples, Italy. He is currently managing the Mafia from his prison cell. Naples is the hometown for the Camorra Mafia, which is famous for narcotics and blackmail.

- *Sam Goodman* was a long-time thief, fence, and quasi-legitimate businessman in the USA. He had a criminal career that spanned for fifty years, beginning in his mid-teens and ending with his death in his mid-sixties with lung cancer. The book "Confessions of a Dying Thief" by Steffensmeier and Ulmer [155] is an indepth ethnographic study of Goodman. At the age of sixty, Goodman settled in Tylersville where he gradually established an upholstery business, which he combined with a small trade of antiques and secondhand furniture. The shop eventually employed seven workers and was Goodman's major involvement and source of income. In addition, he dabbled in fencing, mainly in antiques, jewelry, and guns. Occasionally, he gave tips to thieves for prospective opportunities. He sometimes opened safes that had been carried from the premises by an acquaintance burglar, and he "doctored" phony or fraudulent antiques for resale.

- *Lo Hsing Han* is the narcotics baron of Burma. He contributes to the finances of the military junta in Burma, which holds the peace price laureate Aung San Suu Kyi in house arrest. Lo Hsing Han is mostly

doing his business from Singapore, where he manages his narcotics empire. He started opium trade in the 1950s. He was arrested and sentenced to death in 1973, but was released from prison again in 1980. In 1992 he founded Asia World Company, which is the legal branch of his narcotics empire. He now controls the economy in Burma together with the spider man Tay Za. In 2006, Han arranged the wedding for the daughter of the junta leader Tan Shwe. Tan Shwe is the military dictator in Myanmar (Burma) as he is the chief commander in the military junta [83].

- *Ivo Karamanski* in Bulgaria was the "godfather of Bulgarian Mafia." Car theft was one of the many organized crimes he managed. He was born in 1959 and died already in 1998, when he with his bodyguard was gunned down in what police termed a drunken quarrel. He founded an insurance company as well as twenty other small firms. His personal signature and phrase was: "The good boys go to heaven, the bad ones go wherever they like" (http://www.wikipedia.org/).
- *Ahjed Wali Karzai* is the opium baron of Afghanistan. He is the younger brother of president Hamid Karzai in the country. Sixty members of parliament in Kabul are assumed to be involved in opium production. Karzai's family is not only the wealthy owner of the Afghan Helmand restaurants in the US, the family is also very influential in the Helmand and Kandahar provinces with 62 percent of Afghanistan's opium production and more than half of the global production [171].
- *Terry McGraw* is chief executive in a gang of bank robbers. When they robbed a nightclub, they were unable to switch off the alarm. Police came and arrested McGraw. The next day he was released, because he had an agreement with the police to be an informant. His wife Margaret McGraw had calmed his friends that night by saying: "The boys have been on to me already to say that it's okay, they have it in hand. Not to worry, he'll be home tomorrow. You have to just sit tight." The boys to whom she referred were The Serious Crime Squad in the police force in Glasgow (http://www.gangstersinc.tripod.com/).
- *Bernardo Provenzano* is the chief executive of Cosa Nostra on Sicily. His calling name is "the tractor," because he early in his Mafia career ploughed down people by shooting them down. He was jailed in 2006, but is probably still in charge of the organization. Another calling name is "the bookkeeper," because he in recent years has led the operations of his criminal empire in a discrete and careful way [230].
- *Shinobu Tsukasa* is the sixth-generation boss (kumicho) in the criminal organization Yamaguchi Gumi in Japan. The organization consists of

750 clans with 17.500 members. The organization is involved in almost all kinds of criminal businesses (http://www.gangstersinc.tripod.com/).

- *Curtis Warren* is one of the greatest and richest drug dealers in the UK. His personal wealth is estimated by 185 million pounds. Warren is claimed to be an intelligent man, who neither drinks, smokes, nor uses narcotics. He has a photographic memory of telephone numbers and bank accounts. His organization has good contacts with the Colombian Cali cartel, as well as Marocan and Turkish criminal organizations. His organization imports tons of cocaine and heroin to the UK each year. Presently he is in prison and is expected to be released in 2014 (http://www.gangsterinc.tripod.com/).
- *George Wegers* was the international president of the motorcycle club Bandidos. In October 2006, he pleaded guilty and received a two-year sentence for conspiracy for being engaged in racketeering.
- *Ismael Zambada-Garcia* is capo (captain) and chief executive of the Sinaloa cartel in Mexico. He is "El Mayo," Mexico 's largest drug dealer. He climbed to the top by eliminating rivals and victory over the Colombian cocaine producers. Zambada-Garcia received indirect help from the police because they in Mazatlan shot and killed his strongest rival Ramon Arellano Felix in 2002. The Tijuana cartel of Felix was weakened, while the Sinaloa cartel of Zambada-Garcia was strengthened [145].

These examples illustrate the variety of backgrounds of chief executives in criminal business enterprises all over the world. These examples also illustrate the various ways chief executives have gained the power and position. Such kind of executive career can be compared to the career of many executives in legal organizations.

This book makes a contribution to the emerging academic discipline of police science. Jaschke et al. define police science as follows [30].

Police science is the scientific study of the police as an institution and of policing as a process. As an applied discipline it combines methods and subjects of other neighboring disciplines within the field of policing. It includes all of what the police do and all aspects from outside that have an impact on policing and public order. Currently it is a working term to describe police studies on the way to an accepted and established discipline. Police science tries to explain facts and acquire knowledge about the reality of policing in order to generalize and to be able to predict possible scenarios.

Core topics of police science include strategies and styles of policing, police organizations and management, and policing specific crime types. This book is at the core of police science by studying the serious crime type of organized crime in the context of intelligence strategy implementation.

Organized crime has received increased attention in recent years. To fight organized crime, there is a need to understand criminal organizations. In this book, terminology from the business and management literature is applied to the growing area of organized crime. Rather than thinking of organized crimes as acts of criminals, this book suggests an understanding of criminal organizations similar to non-criminal organizations. This is based on the enterprise paradigm of organized crime as well as the general theory of profit driven crime.

Policing criminal business enterprises requires police intelligence and police investigations. Police intelligence has to be based on an intelligence strategy that is implemented.

Strategy implementation is important because failure to carry out strategy can lead to loosing opportunities and leave police officers reluctant to do strategic planning. Lack of implementation creates problems in maintaining priorities and reaching organizational goals. The strategy execution task is commonly the most complicated and time-consuming part of strategic management. Yet, strategy implementation suffers from a general lack of both academic and practical attention. This book makes a contribution to police strategy and implementation literature by developing a research model to study the extent of intelligence strategy implementation.

In May 2007, the Norwegian Police Directorate concluded a strategy process with the document "National Strategy for Intelligence and Analysis." According to the document, all police districts in Norway had to implement the strategy [109]. This implementation case is to be studied in this book together with the case of the National Intelligence Model (NIM) in the UK. A research question in this book is formulated as follows: *What are determinants of law enforcement strategy implementation?*

1 Criminal Business Enterprises

Criminal organizations take on many different forms requiring different kinds of policing criminal business enterprises. For example, Staring [154] tells the story how Dutch police discovered a Chinese gang controlling human smuggling in the Netherlands:

Just before the summer holidays of 2005, the Dutch National Criminal Investigation Service arrested ten members of a violent Chinese gang. All detainees were suspected of human smuggling, drug trafficking, extortion and liquidations. Police not only found large amounts of drugs and money, but also came across 24 automatic firearms, among which several Uzis. The Chinese gang members were allegedly heavily involved in smuggling Chinese from their home country through the Netherlands to the UK. Smuggled immigrants had to pay up to forty or even fifty thousand euros for their journey and according to the police the gang members were prepared to use violence towards defaulters. In addition, the police suspected some of the arrested gang members being ulinked to previously apprehended snakeheads of other Chinese smuggling organizations. Since the turn of the millennium, the Chinese in the Netherlands have acquired the reputation of being involved in professionally organized human smuggling through Eastern European countries to the UK, using safe houses in harbor cities such as Rotterdam. The involvement of Chinese immigrants with human smuggling in the Netherlands became explicitly visible through the "Dover case." In this tragedy on June 18, 2000, 58 Chinese smuggled immigrants on their way to the UK suffocated in a refrigerated cargo container. The "Dover case" put the Netherlands on the map as a transit country for human smuggling although

it wrongly focused solely on Chinese smugglers. It turned out that Dutch citizens from different ethnic backgrounds and with different ethnic backgrounds and with different judicial status were involved in the lucrative business of human smuggling.

The kinds of gains and benefits obtained from criminal activities vary, depending on the type of crime a criminal organization is involved in. Some benefits are monetary, obtained from theft, robbery, fraud, smuggling, trafficking, etc. In addition, benefits can be psychic, such as the thrill of danger, peer approval, retribution, sense of accomplishment, or power and influence [240].

1.1. Organized Crime and Criminal Organizations

Organized crime denotes a set of criminal actors as well as a set of criminal activities. These for-profit activities include trafficking in drugs, trafficking in women and children, kidnapping for profit, alcohol and cigarette smuggling, credit card fraud, personal protection, and other organized crimes. Thus, organized crime covers a wide range of individuals and activities in a number of crime sectors and markets [65].

A criminal market is like a legal market, a meeting place for supply and demand. Suppliers have goods and services to offer, which customers demand. If there is high demand and little supply, prices will rise. If there is little demand and great supply, prices will fall. Criminal business enterprises are typically in the business of continuous supply of illegal goods and services. In order to make profits, those who offer illegal goods and services must promote their supply in terms of advertising, corruption, and other means.

Corruption in the police is the really dark side of law enforcement. In October 2006, two police officers from Nottingham were sentenced to a total of eight years' imprisonment for passing information about police investigations to organized criminals. The major offender, a police constable who had joined the force in 1999, passed to the owner of a fashion shop details of the investigation into the murder of Marian Bates, a jeweler shot dead in 2003. He was rewarded with discounts on clothes from the store [205]:

Evidence produced showed that the officer had also carried out intelligence checks on suspected criminals at their own request.

An organized crime is any crime committed by persons occupying, in an established division of labor, positions designed for commission of

crime. Furthermore, organized crime is a crime committed by criminal organizations whose existence has continuity over time and across crimes, and that use systematic violence and corruption to facilitate their criminal activities. These criminal organizations have varying capacities to inflict economic, physical, psychological, and societal harm. The greater their capacity to harm, the greater the danger they pose to society. Organized crime involves a continuing enterprise in a rational fashion, geared towards profit achieved through illegal activities [235, 236, 183]. It is an ongoing criminal conspiracy, with a structure greater than any single member, and the potential for corruption and/or violence to facilitate the criminal process. Some criminal organizations develop illegal markets for their goods and services [182].

In order to speak about organized crime, according to the European Union, at least six out of a set of 11 characteristics need to be present, four of which must be numbered 1, 3, 5, and 11 out of the following list [241]:

 (1) collaboration of more than two people;
 (2) each with own appointed tasks;
 (3) for a prolonged or indefinite period of time;
 (4) using some form of discipline or control;
 (5) suspected of the commission of serious criminal offences;
 (6) operating at an international level;
 (7) using violence or other means suitable for intimidation;
 (8) using commercial or business-like structures;
 (9) engaged in money laundering;
(10) exerting influence on politics, media, public administration, judicial authorities, or economy;
(11) Determined by the pursuit of profit and/or power.

Characteristic (8) suggests commercial or business-like structures, as assumed and explored in terms of managing organizations in this paper. Several other characteristics are similar to characteristics of traditional projects. For example, a project is normally a collaboration of more than two people (1), each with his own appointed tasks (2), and for a prolonged, not indefinite period of time (3). While an organized crime will seldom be for an indefinite period of time, the criminal organization might very well be. Compared to legal business projects, we suggest that criminal projects have a tighter control structure.

The economic crime division within the department of crime problems at the Council of Europe [219] applied the following definition of organized crime when evaluating crime analysis:

Organized crime means the illegal activities carried out by structured groups of three or more persons existing for a prolonged period of time and having the aim of committing serious crimes through concerted action by using intimidation, violence, corruption or other means in order to obtain, directly or indirectly, a financial or other material benefit.

Criminal organizations are active and strategic in their efforts to bribe policemen. Kugler et al. [53] find that cooperative police officers are helpful to criminal organizations by passing information to them about police investigations and planned raids, and by making deliberate changes in prosecutions. Such changes then might ensure that the charges against the criminals will not result in guilty verdicts. Corruption of police officers is made easier in many countries by the fact that they are modestly paid and, therefore, are subject to temptation. Combined with violence and threats of violence, corruption is an effective strategy for many criminal organizations.

People tend to believe that large-scale criminal organizations dominate the production, distribution, and sale of illegal drugs all over the world. Paoli [102] questioned this belief by fieldwork in Italy, Russiaand Germany. She found that the great majority of drug deals, even those involving large quantities of drugs, were carried out by numerous, relatively small, and often temporal groups. Many drug enterprises were "crews": loose associations of people, who form, split, and come together again as each opportunity arises. In crews, positions and tasks are usually interchangeable and exclusivity is not required. Many crew members frequently have overlapping roles in other criminal enterprises.

Paoli [102] argues that law enforcement agencies often resort to drawing the picture of large-scale criminal organizations to back their requests for extra funding. She found that it is the "invisible hand of the market" that reduces the effects of their repressive actions. At the retail level, the number of people willing to sell drugs seems to have no end. When five Moroccans are arrested in Milan or Frankfurt, there are fifty ready to do the same job even at less cost.

While criminals seldom act alone, they do not necessarily join a criminal organization. Rather, they often form more or less temporary networks of collaboration [103]. ulinks allow criminals to coordinate their efforts and thus to derive spillover benefits.

Using the theory of the firm enables analysts to compare aspects of legitimate business with those of organized criminal groups across a

number of dimensions that generate transaction costs. These include their organization, boundaries, goals and objectives, competition and rent seeking. Each of these involves transaction costs, which vary according to the extent to which an enterprise is licit or illicit. Table 1.1 adapted from Wright [183] sets out a comparison of legitimate business and organized criminal groups across these dimensions.

1.2. Criminal Enterprise Paradigm

By criminal business enterprise we mean an organization involved in business crimes pursued on a sustained and continuous basis for profit [155]:

> Criminal enterprise refers mainly to that slice of crime and underworld that relies on "business practices," involves *ongoing* criminal ventures, and tends more toward *market* offenses involving consensual exchanges between providers, suppliers, sellers, and customers than toward predatory crimes, like ordinary forms of theft and hustling. Enterprise crime typically involves more supply-related offenses like fencing, bookmaking, loan sharking, smuggling, drug dealing, and sex peddling. Obviously, more sustained and organized forms of burglary, auto theft, fraud, etc. (e.g., theft or fraud rings), can shade into the criminal enterprise and market categories.

This book is based on the enterprise paradigm, which assumes that legal and criminal organizations have similarities. Also, Lyman and Potter [74] base their book on the enterprise paradigm by discussing alternatives and by identifying special characteristics of criminal organizations. Specifically, Lyman and Potter [74] distinguish between criminal groups and criminal businesses.

(1) Groups engaged in criminal enterprise are loosely structured, flexible, and highly adaptable to environmental impacts. These enterprises respond readily to the growth and decline of a market for a particular illicit good or service and to the availability of new distributors and manufacturers.

(2) Organized crime is a business and has many similarities to legal businesses. However, because organized crime conducts its business in the illegal marketplace, it is subject to a series of constraints that limits and defines its organizational structure, size, and mode of operation.

Furthermore, Lyman and Potter [74] identified hostile and uncertain environments as two distinguishing characteristics for criminal organizations.

(1) All criminal enterprises exist in relatively hostile environments primarily as a function of their illegality. As a result of functioning in a hostile environment, criminal enterprises avoid complex technology and stay small in size with little organizational complexity, formality (i.e., formal rules, procedures, chains of command) is lacking, and the organizations are based on mutual understandings and relatively discrete and concise set of operating procedures.

(2) All criminal enterprises exist in relatively uncertain environments, both as a function of the illicit market and of the uncertain and changing nature of law enforcement policies and public attitudes. As a result, the danger of structural elaboration for criminal enterprises increases as the degree of uncertainty increases. However, the uncertainty of the environment requires that organizational structures be informal, with decentralized decision-making authority.

Abadinsky [1] explains that the typical bureaucracy might be problematic for criminal organizations (see Figure 1.1):

Many aspects of bureaucracy are impractical for criminal organizations because they must be concerned with the very real possibility that communications be monitored. Telephone use must be limited (often only to arrange in-person meetings), and written communication is avoided. Information, as well as orders, money, and other goods, is transmitted on an intimate, face-to-face basis. Lengthy chains of command, characteristic of modern bureaucracy, are impractical for IC, and this limits the span of control.

An alternative is the network model as illustrated in Figure 1.2. If a criminal at A wants to contact someone at H, he or she might either communicate through B or through G, D and C, or maybe G, D and E.

Here functions such as marketing, logistics, and finance may be spread to several places in the network. In the American Mafia, a place might be a family [1]:

The member of the American Mafia, acting as a patron, controls certain resources as well as strategic contacts with people who control other resources directly or who have access to such persons.

The member-as-patron can put a client "in touch with the right people." He can bridge communication gaps between the police and criminals, between businessmen and syndicate-connected union leaders; he can transcend the world of business and the world of the illegitimate entrepreneur. He is able to perform important favors and be rewarded in return with money or power. There is a network surrounding the patron, a circle of dyadic relationships orbiting the OC member in which most clients have no relations with another except through the patron.

Table 1.1: Comparison of legitimate business and organized crime groups (Adapted from [183]).

Dimension	Legitimate business	Organized crime groups
Enterprise	Activities cover the whole range of goods and services above the legal limit. May be involved in illicit forms of power brokering or security/protection.	Illicit; only covering a limited range of goods and services below the legal limit. These often involve illicit forms of power brokering or security/protection based on threats and violence.
Transaction costs	Apply to all transaction costs, including incentives, co-operation and enforcement. There is a tendency to minimize such costs to support profits.	Apply to all transactions, including incentives, co-operation and enforcement. In particular, they are relevant to the security and survival of the group.
Organization	Generally hierarchical; sometimes bureaucratic in structure but now less so. Exceptions to this in some specialist fields, where structures are less well defined. Transaction costs because of organizational structures may be somewhat higher than they are in organized crime groups.	Hierarchical, non-bureaucratic, in loose confederation, often with partners. Organizational transaction costs may be lower than in legitimate business, although applying too many draconian sanctions may increase them.
Boundaries	Legal and ethical boundaries. Businesses may impose strategic boundaries by choice. Multinational organizations have only limited jurisdictional boundaries.	No jurisdictional, legal or ethical boundaries. Transaction costs are comparatively low in this dimension.

Table 1.1: Continued.

Dimension	Legitimate business	Organized crime groups
Goals and objectives	Generally accessible, although some business strategies are kept confidential for commercial reasons. Goals are often multiple to satisfy a range of constituencies within the firm.	Clandestine to protect the group and its leaders. Except in "expressive" gangs, goals generally are limited to those that maximize profitability. Transaction costs are minimized in this respect.
Profitability	Optimizing satisfying behavior, depending on the type of business, the multiplicity of its goals and the character of its executive and stakeholders.	Generally maximizing, although personal generosity is not unknown.
Competition	Competitive edge preserved through technology, research, marketing and intellectual property rights. Not adverse to corruption to achieve their ends in some environments. Transaction costs more predictable than they are in a firm pursuing illicit enterprises.	Competitive edge preserved by means of coercion, violence and use of capital resources for corruption on a regular basis. These may appear to reduce transaction costs but there may be a long-term price to pay.
Rent seeking behavior	Some rent-seeking behavior to achieve specific goals. It is rarely immanent in the functions and purposes of the business.	Almost constant rent-seeking behavior, which is often immanent in the functions and activities of the group.

Contrary to received wisdom, Colombia's drug trade has never been dominated by a price-fixing association. Even during the respective heydays of the Medellin and Carli "cartels," cocaine production and exportation in Colombia were highly competitive as independent trafficking groups in more than a dozen cities smuggled substantial amounts of cocaine to American and European drug markets. While some of these enterprises transacted with Pablo Escobar, the Orchoa brothers, and other prominent traffickers; their business relations more closely resembled informal producer-export syndicates than public or private cartels that controlled prices and monopolized markets. Although different groups occasionally pooled their resources to complete large-scale drug shipments, while reducing their exposure to government authorities, they steadfastly maintained their own sources of supply, financing and clientele [45].
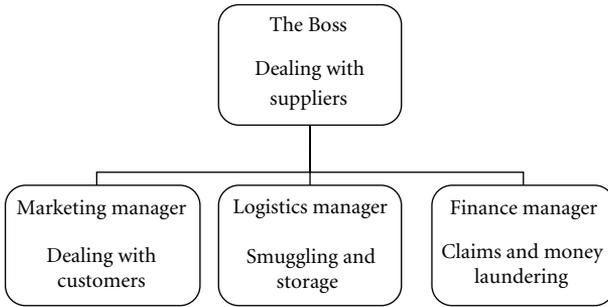
FIGURE 1.1. Bureaucracy model for criminal enterprise.
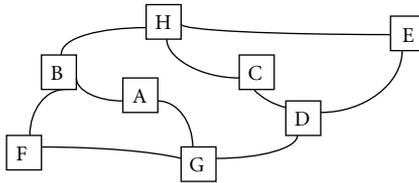
FIGURE 1.2. Network model for criminal enterprise.

Albanese [248] argues that the enterprise model of organized crime grew out of dissatisfaction with both the hierarchical and local ethnic models that had been dominating so far. A growing number of investigations had found that relationships between individuals (hierarchical, ethnic, racial, or friendship) were the genesis of organized crime activity (as opposed to individual, less organized forms of criminal behavior). The view was that if the factors causing these illicit relationships to form (i.e., conspiracies) could be isolated, a determination might be made about the true causes of organized crime. It is the conspiratorial nature of organized crime that makes it serious. It is not the individual drug dealer and illegal casino operator that cause public concern but rather how these individuals organize their customers, suppliers, and functionaries to provide illicit goods and services for profit.

The realization that organized crime operates as a business spurred a series of studies in an effort to isolate those factors that contribute most significantly to the formation of criminal enterprises. For example, when applying general organization theory to criminal activity, it can be found that organized crime stems from the same fundamental assumptions that

govern entrepreneurship in the legitimate marketplace: a necessity to maintain and extend one's share of the market. According to this finding, organized crime groups form and thrive in the same way that legitimate businesses do: they respond to the needs and demands of suppliers, customers, regulators, and competitors. The only difference between organized crime and legitimate business is that organized criminals deal in illegal products, whereas legitimate businesses generally do not [248].

The business enterprise model of organized crime focuses on how economic considerations, rather than hierarchical or ethnic considerations, lie at the base of the formation and success of organized crime groups. Regardless of ethnicity or hierarchy, the enterprise model labels economic concerns as the primary cause of organized criminal behavior. A study of illicit drug sales in the southwest USA found that the drug markets consisted of small organizations rather than massive, centralized bureaucracies, that were competitive rather than monopolistic in nature. A study of bookmaking, loan sharking, and numbers gambling in New York City, found them not monopolies in the classic sense or subject to control by some external organization. Instead, economic forces arising from the illegality of the product tended to fragment the market, making it difficult to control or centralize these illegal activities on large scale. The supply of illegal goods seems not marked by a tendency toward the development of large-scale criminal enterprises, due to the illegal nature of the product. Instead, smaller, more flexible and efficient enterprises characterized this type of organized crime [248].

Organized crime as a business enterprise sees organized crime as the product of market forces, similar to those that cause legitimate businesses to flourish or die in the legal sector of the economy. The major characteristics of the enterprise are summarized as follows by Albanese [248]:

- Organized crime and legitimate business involve similar activities on different ends of a spectrum of legitimacy of business enterprise.
- Operations are not ethnically exclusive or very violent in order to enhance profit.
- Criminal organizations are rarely centrally organized due to the nature of the markets and activities involved.

It is economic relationships, rather than personal relationships, that form the basis for organized crime activity. Organized crime activity is seen as a deviant variation of legitimate business activity, which is often inter-ethnic and nonviolent, because these latter two factors enhance profit maximization. Organized crime can be inter-ethnic in nature and also less violent than is commonly believed. For example, when Jews dominated

the cocaine trade in New York City during the early 1990s, there was also notable evidence of interethnic cooperation involving Italian, Greek, Irish, and Black participants [248].

1.3. The Business of Crime

Profit-driven crime by criminal business enterprises should be understood mainly in economic rather than sociological or criminological terms. In an attempt to formulate a general theory of profit-driven crime, Naylor [91] proposed a typology that shifts the focus from actors to actions in a way that differs from legal studies of crime by identifying inherent characteristics of market crime (illegal distribution), predatory crime (illegal redistribution), and commercial crime (illegal business practice).

(1) *Market crime* involves production and/or distribution of goods, services, or information that are inherently illegal, such as drugs trade, alcohol smuggling and child pornography. There are multilateral exchanges involving producers, distributors, and retailers who sell to customers. Retailers represent supply, while customers represent demand for illegal products. Depending on supply and demand, prices will vary, which in economic terms, is labeled price elasticity. For example, if supply of heroin increases and the demand is stable, then the unit price for heroin will go down on the market. Market crime might also be labeled *illegal distribution*.

(2) *Predatory crime* involves redistribution of legally owned wealth from one party to another. It is typically a bilateral relation between victim and perpetrator. The redistribution represents involuntary transfer supported by violence or deception. The victim is readily identifiable. Transfer takes place in cash, physical goods, services, information, or other material or immaterial valuables. Predatory crime might also be labeled *illegal redistribution*.

(3) *Commercial crime* involves illegal practices during production or distribution of inherently legal goods and services. Illegal methods to produce or distribute are used in a normal business setting. The victim as well as income earned by virtue of illegal methods is identifiable. For example, when corruption is used by a construction company to get a government building contract, then the potential winner of a fair and open bidding competition is a victim. Income earned is the difference between the building price paid to the corrupt company and the market price. Commercial crime might also be labeled illegal *business practice*.

This categorization as any other categorization needs to satisfy several requirements to be trustworthy. First, there should be no apparent overlap between the categories. Next, the categories need to be at the same level, that is, one category should not appear to be part of another category. Finally, there should intuitively be no crime examples not fitting into one of the categories. A way of checking is to apply another categorization. Here we apply criminal businesses in criminal industries for such a comparison of categorizations.

Criminals are associated with or employed by criminal business enterprises. Similar business enterprises are in the same criminal industry. A criminal industry is collection of criminal enterprises that conduct business in the same business area. Similarity refers here to the kind of business they are in.

Here, we will distinguish between four criminal industries.

(1) *Commerce and trade* includes trafficking in women and children, trading in illegal sporting drugs, narcotics commerce, prostitution, stolen cars, smuggling of liquor and cigarettes.

(2) *Theft and robbery* includes shoplifting, game machines robbery, illegal stock exchange, bank forgery, illegal credit card use, illegal cartels among legal businesses, pocket theft, fraud, industrial espionage, art theft, car theft, tax fraud, and identity theft.

(3) *Production* includes illegal printing of official documents, fake credit cards, inside trade, pedophile pornography, slavery, and software copying.

(4) *Violence* includes killing for money, torpedo activity for cash retrieval, terrorism, security services, and sabotage.

Such distinction of criminal business enterprises into criminal industry categories is important, as policing will vary among categories. In criminal commerce and trade, there will be logistics of goods and services that can be traced. In theft and robbery, there will be certain places where the criminal activities occur. In production, there will be physical places where the criminal activities occur. In violence, there will be persons that are hurt.

The largest industry in organized crime is commerce and trade, as illustrated by the size of the area occupied in Figures 1.3 and 1.4. Violence causes the most severe damage to persons, while theft and robbery causes the most severe damage to property. Theft and robbery also cause the most severe damage to society. Since there is no empirical evidence for these diagrams, they have to be understood as research proposals for future research.
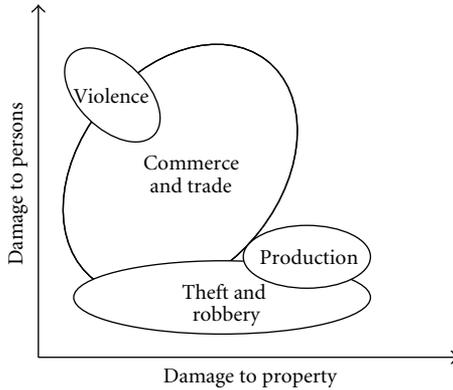
FIGURE 1.3. Criminal industries by damage to persons and property.
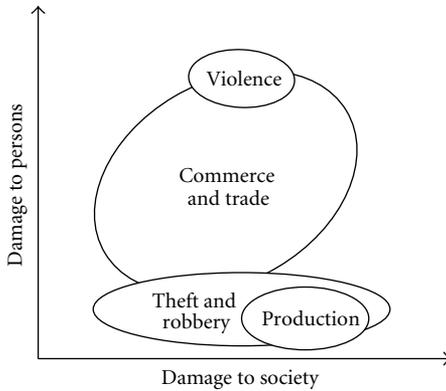
FIGURE 1.4. Criminal industries by damage to persons and society.

Money laundering and corruption are not included in this categorization of criminal business enterprises into industries, as both are included in all industries as supporting organized crime.

When comparing Naylor's [91] categorization with our categorization, we find the following:

(a) commerce and trade are mainly part of market crime;
(b) theft and robbery are mainly part of predatory crime;
(c) production is mainly part of market crime;
(d) violence is not really covered;
(e) commercial crime is a subcategory of market crime.

We leave it to the reader to agree or disagree with this evaluation of Naylor's [91] categorization and to come up with an improved categorization of profit-driven crime.

1.4. Criminal Entrepreneurship

Unfortunately, innovation and learning do not occur in legal enterprises only. Many illegal enterprises seem to innovate and learn quickly over time. Illegal enterprises include trafficking, narcotics, smuggling, and other criminal organizations. For example, Abramova [112] expects more transnational organized crime originating in Russia in the future based on innovation and learning. Having established and/or legalized their positions in the key industries at home, the leaders of Russian criminal organizations will try to expand their economic influence abroad. For this purpose, they are most likely to use the methods perfected in Russia: violence, fraud and corruption, in addition to business financing of their legal enterprises [39]. They will not limit themselves to creating new affiliate criminal structures abroad, but will try to carve out a share of the existing criminal markets overseas. This will transfer hostilities between organized crime groups to other lands; in particular, Southern Europe, South-East Asia and selected key, countries in the West.

Entrepreneurship and organized crime tarnishes the conventional clean and wholesome depiction of entrepreneurs by bringing to life the lived and messy realities of entrepreneurs who run illegal businesses. The purpose of this section is to apply organizational and management concepts such as entrepreneurship to criminal business enterprises to shed light on organized crime. Organized crime has received increased attention in recent years. To fight organized crime, there is a need to understand criminal organizations [229, 250]. In this book, terminology from the business and management literature is applied to the growing area of organized crime. Rather than thinking of organized crimes as acts of criminals, this paper suggests an understanding of criminal organizations similar to non-criminal organizations.

The performance of entrepreneurial businesses is perceived as a function of forming a competitive advantage based on the mobilization and management of strategic knowledge resources. Strategic knowledge resources are characterized by being valuable, non-transferable, non-imitable, combinable, and exploitable. Competitive advantage is also based on strategies that yield higher performance compared to other businesses in the criminal field or area. Clarkson [214] remarks that if the economy of organized crime was removed from the Costa del Sol and from nearby,

Gibraltar the legitimate business economies would struggle to sustain the livelihoods of those communities. Entrepreneurial behavior seems indeed to be part of committed criminality.

Creativity is an important ingredient of entrepreneurship, and creativity in entrepreneurship is defined as the internal processes through which entrepreneurs produce ideas that are valued to them and to their wider communities of practice. Often innovation is related to creativity, where innovation is taken to mean the transformation of creativity into profitable development of goods, services, relationships or internal work practice. Therefore, it is important to understand entrepreneurial behavior practiced in a criminal context. The subject of criminal entrepreneurship continues to be of interest in intelligence and analysis of organized crime in a global context.

Risk management is an important activity in criminal entrepreneurship, as the threat from law enforcement as well as competing criminals has to be taken into account before committing crimes. Information on risks has to be collected from both underworld and overworld sources. Risk has to be evaluated in terms of both probability of something going wrong as well as consequence if something goes wrong.

Symeonidou-Kastanidou [161] argues that there is a need for a new definition of organized crime, where entrepreneurial structure is included as an important element. An entrepreneur is a person who operates a new enterprise or venture and assumes some accountability for the inherent risks. The view on entrepreneurial talent is a person who takes the risks involved to undertake a business venture. Entrepreneurship is often difficult and tricky, as many new ventures fail. In the context of the creation of for-profit enterprises, entrepreneur is often synonymous with founder. Business entrepreneurs often have strong beliefs about a market opportunity and are willing to accept a high level of persona, professional, or financial risk to pursue that opportunity.

In his general theory of entrepreneurship, Shane [137] distinguishes between sources of opportunities as follows.

- *Technological changes* are an important source of entrepreneurial opportunity because they make it possible for people to allocate resources in different and potentially more productive ways. For a criminal entrepreneur, technological changes enable new ways of smuggling physical goods and new ways of communicating with customers and partners.
- *Political and regulatory changes* make it possible for people to reallocate resources to new uses in ways that either are more profitable

or that redistribute wealth from one member of society to another. When a commodity or service becomes illegal in a country, a criminal entrepreneur may find it attractive to serve the new illegal market.

- *Social and demographic changes* transfer information about how people allocate resources in different and potentially more productive ways. For example, urbanization is a source of entrepreneurial opportunity as communication is greater in more densely populated areas.

Why does a criminal entrepreneur choose to organize a criminal business enterprise in order to exploit a market opportunity? Alvarez and Barney [259] argue that entrepreneurial opportunities can be exploited in a variety of ways and seek to understand the conditions under which organizing an enterprise is the most efficient way of exploiting a particular opportunity.

Opportunities to create new economic value exist because of demand for goods and services in illegal markets. Entering an illegal market as entrepreneur is based on the assumption that there are competitive imperfections reflecting changes in technology, demand, or other factors that individuals or groups in an economy attempt to exploit. For example, Ismael Zambada-Garcia is a Mexican drug lord. He is capo (captain) and head of the Sinaloa cartel in Mexico. He is "El Mayo," Mexico's number one drug dealer. He climbed to the top by eliminating rivals and victory over Columbian cocaine producers. Zambada-Garcia got indirect help from the police, because police in Mazatlan shot and killed his most powerful rival Ramon Arellano Felix in 2002. The Tijuana cartel by Felix was weakened, while the Sinaloa cartel of Zambada-Garcia was strengthened [145]. Competitive imperfections were created by the purposeful actions of Zambada-Garcia.

Whatever the source of competitive imperfections is, their existence, per se, often only holds the potential for creating new economic value [259]:

The realization of this potential often requires additional economic activities, activities that sometimes require the organization of a firm and sometimes can be organized through other governance mechanisms, such as arbitrage and alliances.

Alvarez and Barney [259] argue that if a particular individual possesses all the resources—whether tangible or intangible—necessary to create economic wealth associated with a market opportunity, no additional economic organization is required to exploit this opportunity. The individual

is said to be engaging in arbitrage if he or she possess all the resources necessary to exploit a market opportunity, and thus no additional coordination through economic organization is required to create economic value.

If an individual does not possess all the resources required to exploit an opportunity, access to those resources will need to be obtained by the entrepreneur. This can be done in a variety of ways. For example, the entrepreneur can recruit the owners of these resources into a hierarchical structure to gain access required to exploit an opportunity. Alternatively, the entrepreneur might form an alliance with the owners of these resources in a network structure to gain access.

Entrepreneurial leadership is characterized by judgment in decision-making. Judgment is where individuals take decisions without access to any generally agreed rule that could be implemented using publicly available information known to be true. A drug dealer who buys before he or she knows the price at which it can be resold must make a judgment about what the future price will be, for instance. Judgment refers primarily to business decision-making when the range of possible future outcomes is generally unknown. Judgment is required when no obviously correct model or decision rule is available or when relevant data is unreliable or incomplete [260].

Entrepreneurial judgment is ultimately a judgment about the control of resources. As an innovator, a leader, a creator, a discoverer, and an equilibrator, the entrepreneur exercises judgment in terms of resource acquisition and allocation to prosper from criminal business opportunities. As a founder and developer of the business enterprise, the entrepreneur must exercise judgmental decision-making under conditions of uncertainty [260].

Sheptycki [140] finds that criminal entrepreneurship has gained scant recognition among police, because organized crime is stubbornly reduced to a narrow spectrum of phenomena. Therefore, policing practices which aimed at reducing the harms due to organized criminality often fall wide of the mark, and that is the contrast between traditional and new understandings of what constitutes organized crime.

1.5. Growing the Crime Business

Ruggiero [130] tells the story how organized criminals opened up the new criminal market for heroin in the UK. Until 1968, heroin was bought legally with a medical prescription, which partly ended up feeding a grey market. Then new legislation limited medical doctors' power to prescribe, which stimulated criminal entrepreneurs to develop a black market. A turning

point for drug distribution occurred a decade later, as locally centered and poorly structured supply was replaced by organized professionals' well-structured supply chains. The explosion of the heroin consumption probably stimulated this turning point in the early 1980s.

Despite mature markets, aging assets, imprisoned staff members, aging procedures, and increased competition, attractive growth opportunities still exist. Similar to legal enterprises, criminal enterprises may have five ways to grow their business [104].

(1) *Establish a joint venture or strategic alliance in a high growth geographic market.* It was believed that the large size of many markets meant that local organized crime did not need to look beyond the border for new markets. It made sense to focus on serving and expanding domestic markets. But today, globalization, increased offshore manufacturing, and the breakdown of trade barriers call for joint ventures [73]. For example, the Russian Mafia has entered into joint ventures with Colombian cocaine cartels to expand their criminal activity into more markets.

A joint venture is an entity formed between two or more parties to undertake economic activity together. The parties agree to create a new entity by both contributing assets, and they then share in the revenues, expenses, and control of the enterprise. The venture can be for one specific criminal project only, or a continuing business relationship. This is in contrast to a strategic alliance, which involves no assets by the participants, and is a much less rigid arrangement.

A joint venture exists between the Heavenly Alliance in Taiwan and trafficking organizations in the mainland China. While a trafficking organization supplies women, Heavenly Alliance arranges "marriages" and "visits." Women are smuggled from mainland China to Taiwan. Because rules for visiting relatives are very strict, it is difficult for Chinese to obtain a visa to visit their relatives in Taiwan. Therefore, fake marriages are arranged for sex workers [256]. As the prostitution market is growing in Shanghai and other cities in China, Heavenly Alliance may be interested in a new kind of joint venture, where their business concept of a jockey is implemented.

By joining forces with developing foreign businesses, local criminal businesses gain access to high growth markets in a developing country, and they may better serve existing and new customers who are expanding there. For example in terms of joint venture projects, criminal organizations dealing in drugs, gambling, and prostitution may find it attractive to make money during Olympic games in foreign locations, such as in Beijing 2008.

(2) *Collaborate to satisfy an unmet customer need*. Rather than focusing on supply of certain illegal goods and services, attention should shift to

distinctive solutions for customers. To break away from the pack and offer a more distinctive solution to customers, producers need to learn how to collaborate with suppliers, customers and/or competitors to find new and better solutions. This is difficult to do effectively and needs a strong commitment by all parties in order to work. Fortunately if successful, this difficulty represents a barrier to entry and therefore ensures less competition and higher margins.

This growth strategy is common in a number of legal as well as illegal businesses. For example, if the criminal organization is in the business of stealing and smuggling stolen cars, it may increase its revenues if it is at the same time able to handle money laundering for customers buying the cars.

(3) *Diversify or expand product offerings to the best customer segment*. Based on a demand curve, the criminal business enterprise knows that the best customers are willing to pay more than the market price for their products. If the enterprise was to offer complementary goods and services, then the highest prices are to be achieved in the best customer segment. It is necessary to first have a clear understanding of who the most profitable customers are and identify what additional goods and services they need.

(4) *Eliminate the bottom ten percent of the business*. To grow a criminal business, it is necessary to ensure that it only competes in markets where it has a strong competitive advantage. Where an advantage does not exist, it is necessary either to invest to attain it or to withdraw from the market completely. While withdrawal means lower volumes on the short term, it often ultimately leads to a stronger, more sustainable enterprise and one that is better positioned to grow in core markets.

(5) *Leverage underused intangible assets in the business*. Internal capabilities, competencies, and knowledge that have evolved to support the current business are often overlooked as possible sources of competitive advantage [100]. Even worse, they are sometimes viewed as expendable when the focus is on cost cutting and streamlining the organization. These intangible assets are typically information-based and include customer relationships, access to supply networks, and corrupt politicians. The critical challenge is often to identify how best to leverage these assets.

Similarly, DiModica [232] suggests methods to grow the business. First step is to identify the market gap, which is to discover and uncover sales opportunities where market demand is greater than supply. Next step is to pick a growth model, where the alternatives are labeled market duplication, market variation, market symbiotic attachment, market consolidation, market innovation [88], and new market launch.

Growth as a goal has to be on both short-term and long-term levels to achieve both prosperity and viability. Business growth has to be accompanied and supported by growing leaders, otherwise it may go wrong.USA managers in Hyundai Motors and Kia Motors never seemed to please their Korean superiors, and the North American management staff was in constant turnover. Then, the chairman of Hyundai Motors, Chung Mongkoo, and his son, Kia Motors president Chung Euisun, came under investigation for their roles in scandals involving political slush funds and the misuse of company money.

Matthews [81] identified four factors essential for growth.

(1) *Talent*. An entrepreneur takes the risk to create something from nothing. Such talent must be developed by educating people about the basics of enterprise and foster their entrepreneurial instincts. Some people are more predisposed and willing to take risks than others. Not everyone has the skills or knowledge to grow a business enterprise.

(2) *Idea*. To meet target customer's needs and wants, the criminal enterprise must have a "better idea" than competitors and law enforcement. The idea is broken down into resources and organizing, as well as products and markets.

(3) *People*. Good criminals may be hard to find. They will often tend to favor opportunistic behavior, where their own goals are more important than goals of the criminal business enterprise. Thus it is important to recruit knowledgeable people who stay loyal in critical situations. Management needs to lead people, build an organization for growth, and develop an approach to align criminals' efforts around execution of a growth strategy.

(4) *Capital*. While entrepreneurs may have the personal resources to start a company, very few have enough to grow a company. This is especially the case in criminal business enterprises where the entrepreneurs enjoy a luxurious standard of living, without securing funds through money laundering for future investments. Most entrepreneurs need to learn how to manage their balance sheet, do debt financing, trust strategic alliances and joint ventures, and understand finance.

The attributes of the criminal organizations that make the crimes they commit organized crime include criminal sophistication, structure, self-identification, and the authority of reputation, as well as their size and continuity. These criminal organizations exist largely to profit from providing illicit goods and services in public demand or providing legal goods

and services in an illicit manner. But they may also penetrate the legitimate economy, or in the case of the Mafia, assume quasi-governmental roles. However they choose to do it, and whatever they chose to do, their goal remains the same-to make money, as much as they can. Based on such an understanding of organized crime, this chapter has explored organizational and management concepts from legal businesses to shed light on criminal organizations.

1.6. The Case of Hawala Bankers Transferring Criminal Proceeds

In the summer of 2008, Nigerian prostitute went to an official bank in Oslo, Norway, to transfer money to Nigeria. This seemed to be a legal transaction as proceeds from prostitution are legal income. What the bank did not know was that the money was not from prostitution. The money was proceeds from drug trafficking rather than human trafficking, which is illegal income. When the bank discovered the prostitutes were lying about their income, money transfers were stopped.

Therefore, the Nigerian drug dealers went to hawala bankers instead. Hawala bankers are financial service providers who carry out financial transactions without a license and therefore without law enforcement control. They accept cash at one location and pay a corresponding sum in cash or other renumeration at another location. This service is similar to services provided by official banks, but hawala bankers disregard all legal obligations concerning the identification of clients, record keeping, and the disclosure of unusual transactions, to which these official financial institutions are subject [196].

Hawala banking has a long history [196]:

Primarily entrenched in the monetary facilitation of trade between distant regions, these bankers still provide a useful service especially to migrants who wish to transfer money to their country of origin. The informal system has long existed but only recently gained prominence in conflict torn regions, such as Afghanistan and Somalia. After years of conflict, confidence in the formal banking system is absent and the remaining banks neither accept deposits nor extend loans. Significantly, these formal banks do not have the capacity to provide international or domestic remittance services.

Both official and hawala banks often transfer money without actually moving it. They are remitted without being physically moved elsewhere. It is also not a distinguishing feature of hawala banking that funds or value are

transferred without leaving trails of the completed transactions. But rather, the essence of hawala banking is simply that financial transactions occur in the absence of, or parallel to, official banking sector channels [196]:

> Hawala banking is not certified and supervised by any government. There are international differences in regulation and supervision of financial transactions by Central Banks, but hawala banking has been legally banned in almost all countries of the world, even those, which are strongly Islamic, such as Pakistan and Iran.

Transactions between hawala bankers are based on trust. Banker A receives money paid out by hawalader B, making A indebted to B. Next time the roles will be reversed: B receives money from a remitter to be paid out by A to the recipient. Conflicts and misunderstandings about settlements seem likely to arise; yet in practice relations between hawaladers appear to run smoothly [196].

2 Theories of Criminal Enterprises

Organized crime has received increased attention in recent years. To understand the "what, how, and why" of the organized crime and to stimulate know-what, know-how and know-why, there is a need for theory development. A theory might be a prediction or explanation, a set of interrelated constructs, definitions, and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining natural phenomena. The systematic view might be an argument, a discussion, or a rationale, and it helps to explain or predict phenomena that occur in the world.

In our context of organized crime, we search for theoretical explanations in two streams of research. One stream of research we label "criminology theories of organized crime" where theories are developed explicitly to explain the phenomenon of organized crime. Another stream of research we label "management theories of organized crime," where general management theories are applied to the phenomenon of organized crime [4].

It is difficult to overstate the importance of theory to law enforcement understanding of organized crime and criminal organizations. Theory allows analysts to understand and predict outcomes on a probabilistic basis [217]. It also allows them to describe and explain a process or a sequence of events. Theory prevents analysts from being confused by the complexity of the real world by providing a linguistic tool for organizing a coherent understanding of the real world. Theory acts as an educational device that creates insights into criminal phenomena.

2.1. Criminology Theories of Organized Crime

Traditionally, a criminal organization is often thought of as a monopolistic firm, and the *theory of monopoly* is predominantly used to analyze

organized crimes. The monopolistic model implies that potential criminals have no other choice but are forced to join the criminal organization if they decide to commit a crime. Chang et al. [210] find this perspective to be less than exhaustive in terms of describing criminal behavior. They argue that the determination of the market structure for crime should be endogenous, which has notable implications for the optimal crime enforcement policies and crime itself.

To recover the conventionally neglected facts and provide a more complete picture regarding organized crime, Chang et al. [210] developed a model in terms of a criminal decision framework in which individual crime and organized crime are coexisting alternatives to a potential offender. The model makes the size of a criminal organization a variable and explores interactive relationships among sizes of criminal organization, the crime rate, and the government's law enforcement strategies. Model runs showed that the method adopted to allocate the criminal organization's payoffs and the extra benefit provided by the criminal organization play crucial roles in an individual decision to commit a crime and the way in which he or she commits that crime.

Gross [9] argued in his classical article on the *theory of organizational crime* that more than some areas of sociology, studies of crime, and delinquency usually have a strong theoretical base. He suggested two important theoretical relationships. First, the internal structure and setting of organizations is of such nature as to raise the probability that the attainment of the goals of the organization will subject the organization to the risk of violating societal laws of organizational behavior. Secondly, persons who actually act for the organization in the commission of crimes, by selective processes associated with upward mobility in organizations, are likely to be highly committed to the organization and be, for various reasons, willing and able to carry out crime, should it seem to be required in order to enable the organization to attain its goals, to prosper, or minimally, to survive.

One of the most widely held theories of organized crime today in USA is known as the *alien conspiracy theory*. This theory blames outsiders and outside influences for the prevalence of organized crime in society. Over the years, unsavory images, such as well-dressed men of foreign descent standing in shadows with machine guns and living by codes of silence, have become associated with this theory. The alien conspiracy theory posits that organized crime (the Mafia) gained prominence during the 1860s in Sicily and that Sicilian immigrants are responsible for the foundations of US organized crime, which is made up of twenty-five or so Italian-dominated crime families [74].

Lombardo [71] has challenged the alien conspiracy theory as an explanation of the origin of organized crime in USA, as he reviewed the history of Black Hand (organized crime group) activity in Chicago in the early 20th century, arguing that the development of Black Hand extortion was not related to the emergence of the Sicilian Mafia, but rather to the social structure of the American society.

Rational choice theory suggests that people who commit crimes do so after considering the risks of detection and punishment for the crimes, as well as the rewards of completing these acts successfully. Examples of this theory include a man who discovers that his wife is having an affair and chooses to kill her, her lover, or both; the bank teller who is experiencing personal financial difficulty and decides to embezzle funds from the bank to substantially increase her earnings; and an inner-city youth who decides that social opportunities are minimal and that it would be easier to make money by dealing crack cocaine [74].

In organized crime, Shvarts [141] suggests that rational choice theory can explain the growth of the Russian Mafia. Because of low income and financial difficulties at the individual level, combined with a corrupt police force, it seems rational to move into organized crime to improve the standard of living for members joining the criminal organization.

Some theorists believe that crime can be reduced through the use of deterrents. The goal of deterrence, crime prevention, is based on the assumption that criminals or potential criminals will think carefully before committing a crime if the likelihood of getting caught and/or the fear of swift and severe punishment is present. Based on such belief, *general deterrence theory* holds that crime can be thwarted by the threat of punishment, while *special deterrence theory* holds that penalties for criminal acts should be sufficiently severe that convicted criminals will never repeat their acts [74].

Furthermore, *learning theories* have been used to explain the onset of criminal activity. The body of research on learning theory stresses the attitudes, ability, values, and behaviors needed to maintain a criminal career [74].

Next, *cultural deviance theories* assume that slum dwellers violate the law because they belong to a unique subculture that exists in lower-class areas. The subculture's values and norms conflict with those of the upper class on which criminal law is based [74].

Yet another criminology theory is *social control theory*, where social control refers to those processes by which the community influences its members toward conformance with established norms of behavior [1]:

Social control theorists argue that the relevant question is not, Why do persons become involved in crime, organized or otherwise? but, rather, Why do most persons conform to societal norms? If, as control theorists generally assume, most persons are sufficiently motivated by the potential rewards to commit criminal acts, why do only a few make crime a career? According to control theorists, delinquent acts result when an individual's bond to society is weak or broken. The strength of this bond is determined by internal and external restraints. In other words, internal and external restraints determine whether we move in the direction of crime or of law-abiding behavior.

Bruinsma and Bernasco [195] used *social network theory* to describe and tentatively explain differences in social organization between criminal groups that perform three types of transnational illegal activities: smuggling and large-scale heroin trading, trafficking in women, and trading in stolen cars. Groups that operate in the large-scale heroin market tend to be close-knit, cohesive, and ethnically homogeneous. Groups active in the trafficking of women have a chain structure, while those that operate in the market for stolen cars are characterized by three clusters of offenders in a chain. Both groups are less cohesive than criminal groups in the large-scale heroin market are. The differences in social organization between the three types of illegal activities appear to be related to the legal and financial risks associated with the crimes in question, and thereby to the required level of trust between collaborating criminals.

It is often argued that criminal organizations have a network structure. For example, similar to other forms of organized criminality, including weapons trafficking, immigrant smuggling, and prostitution; drug trafficking in Colombia occurs in fluid social systems where flexible exchange networks expand and retract according to market opportunities and regulatory constraints. This durable, elastic structure did not emerge overnight but developed over many years as entrepreneurs built their enterprises through personal contacts and repeated exchanges and resources they accumulated gradually, while drawing on social traditions, such as contraband smuggling, that extend far back to Colombia's colonial past [45].

Krebs et al. [54] applied non-cooperative *game theory* to examine drug smuggling. The study tried to determine if fluctuations in key policy variables have the potential to diminish the expected utility of smuggling drugs, thus encouraging lawful behavior. The study simulation indicated that decreasing the expected utility of smuggling drugs to a level where lawful behavior is likely to be chosen is an infeasible mission from a policy

perspective. Additionally, a recent drug smuggling innovation, known as black powder, is likely to only increase the expected utility of smuggling drugs. Black powder is a simple industrial cloaking method that renders many surveillance strategies and chemical tests futile. The consequences of black powder and the exchange between drug control agents and drug smugglers are important in the simulation.

Based on utility theory, game theory involves the mathematical representation of the decision making process in situations where the interests of two or more players are interconnected and interdependent. A player may be either an individual or a group that operates as a single decision making entity. Players in situations of uncertainty choose from a set of available actions called strategies, each of which offers a probability of producing a possible outcome. The choice a player makes is determined by the anticipated utility, viewed as an indication of individual's beliefs and preferences, that each alternative behavioral strategy is expected to produce [54].

It has been argued that some ethnic backgrounds are less qualified for organized crime. For example, law enforcement in the USA is somewhat reluctant to accept the existence of Afro-American criminal organizations, based primarily on the opinion that such ethnic groups are incapable of structuring syndicates of any consequence, similar to the Cosa Nostra. Such an opinion is based on the *theory of race*. Contrary to this opinion, Walsh [175] found powerful black organized crime groups in the USA. For example, Afro Americans established connections with Asian drug dealers during the Vietnam War. Much of the heroin on the streets of American cities during this period had been smuggled from Vietnam in the bodies of dead servicemen.

Profit-driven crime by criminal business enterprises should be understood mainly in economic rather than sociological or criminological terms. In an attempt to formulate a general *theory of profit-driven crime*, Naylor [91] proposed a typology that shifts the focus from actors to actions by distinguishing between market crime, predatory crime, and commercial crime.

2.2. Management Theories of Organized Crime

Agency theory has broadened the risk-sharing literature to include the agency problem that occurs when cooperating parties have different goals and division of labor. The cooperating parties are engaged in an agency relationship defined as a contract under which one or more persons (the principal(s)) engage another person (agent) to perform some service on

their behalf which involves delegating some decision making authority to the agent [31]. Agency theory describes the relationship between the two parties using the metaphor of a contract.

According to Eisenhardt [242], agency theory is concerned with resolving two problems that can occur in agency relationships. The first is the agency problem that arises when the desires or goals of the principal and agent conflict and it is difficult or expensive for the principal to verify what the agent is actually doing. The second is the problem of risk sharing that arises when the principal and agent have different risk preferences. The first agency problem arises when the two parties do not share productivity gains. The risk-sharing problem might be the result of different attitudes towards the use of new technologies. Because the unit of analysis is the contract governing the relationship between the two parties, the focus of the theory is on determining the most efficient contract governing the principal-agent relationship given assumptions about people (e.g., self-interest, bounded rationality, risk aversion), organizations (e.g., goal conflict of members), and information (e.g., information is a commodity which can be purchased).

Garoupa [264] applied agency theory to criminal organizations. He models the criminal firm as a family business with one principal and several agents. He has in mind an illegal monopoly where it is difficult to detect and punish the principal unless an agent is detected. Furthermore, it is assumed that agents work rather independently so that the likelihood of detection of one agent is fairly independent from another. An example of such agents is drug dealers in the street with the principal being the local distributor. Another example would be agents as extortionists or blackmailers distributed across the city with the principal being the coordinator of their activities providing them information or criminal know-how.

Alliance theory is concerned with partnership, often referred to as alliance, which has been noted as a major feature of criminal organizations. Partnership can reduce the risk of inadequate contractual provision. Trust is a critical success factor in partnerships. Criminal organizations are often based on trust between its members. Lampe and Johansen [60] identified four kinds of trust in organized crimes. First, individualized trust relates specifically to agreeable behavior of an individual. Next, trust based on reputation relates to trust based on publicly formed and held opinion about the ones to be trusted. This type of trust hanges on the flow of information. Information may be dispersed in a context associated with illegality, for example the underworld "grapevine system."

Third kind of trust is labeled generalized trust, which comprises constellations in which trust is ulinked to social groups rather than to

a particular individual. The trustor places trust in the trustee based on the presumption that the trustee conforms to some more general norms or patterns of behavior, for example, codes of conduct such as mutual support and non-cooperation with law enforcement that the trustee can be expected to share as a member of a subculture or association. Finally, there is abstract trust, which refers to trust that is placed in abstract systems that set and maintain certain basic conditions, for example, the government, the monetary system, or the medical system in society at large [60].

Das and Teng [223] studied how alliance conditions change over the different stages of alliance development to understand the development processes. They defined the following stages in the alliance development process.

- Formation Stage. Partner firms approach each other and negotiate the alliance. Partner firms then carry out the agreement and set up the alliance by committing various types of resources. The alliance is initiated and put into operation. Alliances will be formed only under certain conditions. These conditions include a relatively high level of collective strengths, a low level of inter-partner conflicts, and a high level of interdependencies.

- Operation Stage. Not only is the formation stage directly influenced by alliance conditions, the transition from the formation stage to the operation stage is also dictated b the same alliance conditions variables. During the operation stage, partner firms collaborate and implement all agreements of the alliance. The alliance will likely grow rapidly in size during this stage, somewhat akin to the growth stage of organizational life cycles. Other than the growth route, an alliance may also be reformed and/or terminated at this stage.

- Outcome Stage. During this stage, alliance performance becomes tangible and can, thus, be evaluated with some certainty. There are four possible outcomes for an alliance at this stage: stabilization, reformation, decline, and termination. A combination of outcomes is also possible, such as a termination after reformation. Alliance reformation and alliance termination do not necessarily signal alliance failure. Reformation and termination may be the best option under certain circumstances, such as the achievement of pre-set alliance objectives. Alliance condition variables continue to play a decisive role in the outcome stage. The particular alliance outcome will depend on the condition of the alliance.

Das and Teng [224] discussed partner analysis and alliance performance. An important stream of research in the alliance literature is about partner selection. It emphasizes the desirability of a match between the partners, mainly in terms of their resource profiles. The approach is consistent with the resource-based theory of the firm, which suggests that competitors are defined by their resources profiles.

Network theory argues that when locating transnational crime, it is often found that networks are the media through which individuals and groups move between the local and the global intelligences. According to Beare [90], empirical research reveals that networks consist of a complex mix of criminals that range from the sophisticated specialists to the opportunists—all operating within the same crime field.

According to network theory, a network exhibits network externalities. An organization exhibits network externalities when it becomes more valuable to members as more people join it and take advantage of it. A classic example from technology is the telephone, where the value for each subscriber increases exponentially with the number of network subscribers, to whom you can talk and get services from.

Lemieux [63] argues that criminal organizations are both networks and businesses. Criminal organizations, when viewed as networks, have characteristics common to other social networks as well as specific characteristics associated with the fact that these organizations are criminal businesses. Common characteristics include size of networks, density, couplings, and ties.

In criminal networks, the core is generally composed of actors connected by strong ties, while the relationship between the core and the surrounding sub-networks is achieved through weak ties. These weak ties are ties through which information is transmitted in an upward direction and orders are transmitted in a downward direction [63].

Lemieux [63] describes seven roles that can be found in all networks, and one individual can assume more than one role. They are described below.

(1) Organizers are the core determining the scale and scope of activities.
(2) Insulators transmit information and orders between the core and the periphery while insulating the core from the danger posed by infiltration.
(3) Communicators ensure feedback regarding orders and directives that they transmit to other actors in the network.
(4) Guardians ensure network security and take necessary measures to minimize its vulnerability to infiltrations or external attack.

(5) Extenders extend the network by recruiting new members and also by negotiating collaboration with other networks and encouraging collaboration with the business sector, government, and justice.

(6) Monitors are dedicated to the network's effectiveness by providing information to organizers regarding weaknesses and problems within the network so that the organizers can resolve them.

(7) Crossovers are part of a criminal network, but continue to work in legal institutions, whether governmental, financial, or commercial.

Several of the seven roles make it difficult to combat criminal networks. According to Lemieux [63], this is particularly true for the roles of insulators, guardians, monitors, and crossovers.

Contractual theory is concerned with the role of contracts in social systems. Lampe [58] suggests that cooperation in a criminal group is typically based on some form of contract. A criminal contract between criminals is connected to a criminal activity and might cover several elements, such as participation, tasks, responsibility, equipment, plans, profit sharing, escape routes, behavioral codes, and norms.

Luo [73] examined how contract, cooperation, and performance are associated with one another. He argues that contract and cooperation are not substitutes but complements in relation to performance. A contract alone is insufficient to guide evolution and performance. Since organized crime often involves both intra-organizational as well as inter-organizational exchanges that become socially embedded over time, cooperation is an important safeguard mechanism mitigating external and internal hazards and overcoming adaptive limits of contracts. The simultaneous use of both contractual and cooperative mechanisms is particularly critical to organized crime in an uncertain environment.

Relational contract theory was created by Macneil [75], who has been doing relational contracts since the mid sixties, and who by contract means relations among people who have exchanged, are exchanging, or expect to be exchanging relations in the future. He finds that experience has shown that the very idea of contract as relations in which exchange occurs—rather than as specific transactions, specific agreements, specific promises, specific exchanges, and the like—is extremely difficult for many people to grasp. Either that or they simply refuse to accept that contract can be defined as relations among people in an exchange. Macneil [75] searched for roots to summarize contract in a useful manner. He tried to distill what he found into a manageable number of basic behavioral categories growing out of those roots. Since repeated human behavior invariably creates norms, these behavioral categories are also normative categories.

He identified the following ten common contract behavioral patterns and norms: (1) role integrity—requiring consistency, involving internal conflict, and being inherently complex, (2) reciprocity—the principle of getting something back for something given, (3) implementation of planning, (4) effectuation of consent, (5) flexibility, (6) contractual solidarity, (7) the restitution, reliance, and expectation interests (the ulinking norms), (8) creation and restraint of power (the power norm), (9) proprietary of means, and (10) harmonization with the social matrix, that is, with supra-contract norms. Relational contract theory postulates that where the ten common contract norms are inadequately served, exchange relations of whatever kind will fall apart.

Neo-classical economic theory regards every business organization as a production function [180], and where their motivation is driven by profit maximization. This means that companies offer products and services to the market where they have a cost or production advantage. For criminal organizations, this theory has an impact on the production function in organized crime.

Theory of core competencies is a popular theory in legal businesses. According to Prahalad and Hamel [115], core competencies are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies. Since core competence is about harmonizing streams of technology, it is also about the organization of work and the delivery of value. For criminal organizations, this theory has an impact on the in-house competencies for organized crime.

Resource-based theory implies that unique organizational resources of both tangible and intangible nature are the real source of competitive advantage. With resource-based theory, organizations are viewed as a collection of resources that are heterogeneously distributed within and across industries. Accordingly, what makes the performance of an organization distinctive is the unique bland of the resources it possesses. Firm resources include not only its physical assets such as plant and location but also its competencies. The ability to leverage distinctive internal and external competencies relative to environmental situations ultimately affects the performance of the business [17]. For criminal organizations, there is a need for strategic resources, which are characterized by being valuable, non-imitable, non-transferable, exploitable, and combinable.

Relational exchange theory is based on relational norms. Contracts are often extremely imperfect tools for controlling opportunism. While relational contracts may mitigate some opportunistic behavior, significant residual opportunism may remain. It is possible that transactors using

relational contracts may incur significant ex-post bargaining costs as they periodically negotiate contract adjustments [35]. Relational norms concerned with behavior in critical situations are critical for criminal organizations.

Stakeholder theory implies that the identification of stakeholders and their needs is important for decision-making in organizations. A stakeholder is any group or individual who can affect, or is affected by, the achievement of a corporation's purpose. Stakeholder theory is distinct because it addresses morals and values explicitly as a central feature of managing organizations. The ends of cooperative activity and the means of achieving these ends are critically examined in stakeholder theory in a way that they are not in many theories of strategic management [107]. Important stakeholders for a criminal organization might for example be the Mafia boss and the mayor.

Theory of firm boundaries claims that the resource-based view, transaction costs, and options perspectives each explain only a portion of managerial motivation for decisions on firm boundaries. The rationale supporting the choices organizations make regarding member sourcing is multidimensional; firms are not only seeking potential sources of competitive advantage, but are also seeking to avoid opportunism and to preserve or create flexibility [132]. There has been a renewed debate on the determinants of firm boundaries and their implications for performance. According to Schilling and Steensma [132], the widely accepted framework of transaction cost economics has come under scrutiny as a comprehensive theory for firm scale and scope. At the heart of this debate is whether the underlying mechanism determining firm boundaries is a fear of opportunism (as posited by transaction cost economics), a quest for sustainable advantage (as posed by resource-based view theorists and others), a desire for risk-reducing flexibility (as it has recently gained increased attention in work on options), or a combination of factors. Although perspectives on firm boundaries such as transaction costs or the resource-based view are based on fundamentally different motivations for pursuing hierarchical control over market contracts, they rely on common resource or context attributes as antecedents.

Social exchange theory was initially developed to examine interpersonal exchanges that are not purely economic. Several sociologists are responsible for the early development of this theory. These theorists view people's social behavior in terms of exchanges of resources. The need for social exchange is created by the scarcity of resources, prompting actors to engage one another to obtain valuable inputs. Social exchange can be defined as voluntary actions of individuals that are motivated by return they are expected

to bring and typically in fact bring from others. Social exchange can be viewed as an ongoing reciprocal process in which actions are contingent on rewarding reactions from others. There are important differences between social exchanges and economic exchanges. Social exchanges may or may not involve extrinsic benefits with objective economic value. In contrast to economic exchanges, the benefits from social exchanges often are not contracted explicitly, and it is voluntary to provide benefits. As a result, exchange partners are uncertain whether they will receive benefits. Thus social exchange theory focuses on the social relations among the actors that shape the exchange of resources and benefits. While its origins are at the individual level, social exchange theory has been extended to organizational and inter-organizational levels [223].

We have introduced twelve management theories concerned with criminal organizations. In Table 2.1, these theories are compared in terms of what they imply for criminal organizations.

Table 2.1: Summary of management theories.

#	Theory	What is important for criminal organizations?
1	Agency theory	The principal and agent (s) need to have common goals and the same degree of risk willingness and aversion.
2	Alliance theory	Interdependence between the partners based on trust, comfort, understanding, flexibility, co-operation, shared values, goals and problem solving, interpersonal relations and regular communication.
3	Network theory	Network externalities and different roles in the network.
4	Contractual theory	Common contract behavioral patterns include role integrity, reciprocity, implementation of planning, effectuation of consent, flexibility, contractual solidarity, reliance, restraint of power, proprietary of means, and harmonization with the social environment.
5	Transaction cost theory	Frequent and standardized interactions.
6	Neo-classical economic theory	More cost-effective production than competitors.
7	Theory of core competencies	Improvement in core capabilities and competencies.

Table 2.1: Continued.

#	Theory	What is important for criminal organizations?
8	Resource-based theory	Strategic resources are unique, valuable, difficult to imitate, exploitable and difficult to substitute.
9	Relational exchange theory	Norms determine behavior in three main dimensions: flexibility, information exchange, and solidarity.
10	Stakeholder theory	Balance interests of powerful people.
11	Theory of firm boundaries	Portfolio management.
12	Social exchange theory	Only where each of the parties can follow their own self-interest when transacting with the other self-interested actor to accomplish individual goals that they cannot achieve alone and without causing hazards to the other party.

2.3. Organized Crime in the US

As previously mentioned, one of the most widely held theories of organized crime today in the USA is known as the *alien conspiracy theory.* This theory blames outsiders and outside influences for the prevalence of organized crime in society. Over the years, unsavory images, such as well-dressed men of foreign descent standing in shadows with machine guns and living by codes of silence, have become associated with this theory. The alien conspiracy theory posits that organized crime (the Mafia) gained prominence during the 1860s in Sicily and that Sicilian immigrants are responsible for the foundations of US organized crime, which is made up of twenty-five or so Italian-dominated crime families [74].

FBI [252] argues that international organized crime poses eight strategic threats to the USA.

- *Threat 1. International organized criminals have penetrated the energy and other strategic sectors of the economy.* International organized criminals and their associates control significant positions in the global energy and strategic materials markets, which are vital to US national security interests. They are now expanding their holdings in the US strategic materials sector. Their activities tend to corrupt the normal workings of these markets and have a destabilizing effect on US geopolitical interests.

- *Threat 2. International organized criminals provide logistical and other support to terrorists, foreign intelligence services and governments.* Each of these groups is either targeting the USA or otherwise acting in a manner adverse to US interests.

- *Threat 3. International organized criminals smuggle/traffic people and contraband goods into the USA.* Smuggling/trafficking activities seriously comprise US border security and at times national security. Smuggling of contraband/counterfeit goods costs US businesses billions of dollars annually, and the smuggling/trafficking of people leads to exploitation that threatens the health and lives of human beings.

- *Threat 4. International organized criminals exploit the US and international financial system to move illicit funds.* International organized criminals transfer billions of dollars of illicit funds annually through the US financial system. To continue this practice, they seek to corrupt financial and non-financial intermediaries globally.

- *Threat 5. International organized criminals use cyberspace to target US victims and infrastructure.* International organized criminals use an endless variety of cyberspace schemes to steal hundreds of millions of dollars at a cost to consumers and the US economy. These schemes jeopardize the security of personal information, the stability of business and government infrastructures, and the security and solvency of financial investment markets.

- *Threat 6. International organized criminals are manipulating securities exchanges and perpetrating sophisticated frauds.* Increasingly, US domestic and international securities markets have become ripe sectors for abuse by international organized criminals who seek to enrich themselves from the pockets of unsuspecting investors. Using the fast-paced securities markets, the Internet and the wire services—where money, communications, and inducements can be exchanged in milliseconds—international organized criminals manipulate international borders and the limitations in law enforcement's detection capability to their advantage without the need to set up a base of operations in any one's location.

- *Threat 7. International organized criminals corrupt and seek to corrupt public officials in the USA and abroad.* They corrupt public officials to operate and protect their illegal operations, and to increase their sphere of influence. In some countries, corrupt public figures and organized criminals have attained status, power, and wealth far outweighing those of legitimate authorities. In others, corruption occurs as an accepted means of doing business. Corrupt leaders in such countries

who aid and support organized crime and are beholden to it cause substantial harm to their own people and often to US strategic interests. In the most serious instances, the corrupt official is himself or herself for all practical purposes the leader of an organized criminal group.

- *Threat 8. International organized criminals use violence and the threat of violence as a basis for power.* Violent tactics is one of the tools applied by organized crime groups. Violence is used as a threat to the physical security of individuals as well as to the economic wellbeing of people and neighborhoods, and as a threat to the ability of law enforcement to investigate their crimes when the threat of violence is used as a tool of coercion.

In summary, FBI [252] calls for an improved understanding of organized crime and criminal organizations to respond better in terms of policing and law enforcement.

The Organized Crime Control Act in the USA defines organized crime as "the unlawful activities of … a highly organized, disciplined association." The act of engaging in criminal activity as a group is referred to in the USA as racketeering, which is often prosecuted federally under the Racketeer Influenced and Corrupt Organizations Act. The FBI operates an organized crime section from its headquarters in Washington and is known to work with other national law enforcement agencies, for example, Polizia di Stato in Mexico and the Royal Canadian Mounted Police in Canada. The FBI works with federal (e.g., Drug Enforcement Administration and United States Coast Gard), state (e.g., Massachusetts State Police Special Investigation Unit and New York State Police Bureau of Criminal Investigation), and city (e.g., New York Police Department Organized Crime Unit and Los Angeles Police Department Special Operations Divisions) law enforcement agencies.

Perhaps the best-known criminal organization supporting the alien conspiracy theory is the Sicilian Mafia, which expanded into the USA as Cosa Nostra. "The Godfather" had more influence on the public mind and the minds of many public officials than did any library filled with scholarly works that argued for the true nature of organized crime, noted Kenney and Finckenauer [47]. Don Corleone was the consigliori to the family. Between the head of the family, Don Corleone, who dictated policy, and the operating level of men who actually carried out the orders of the Don, there were three layers, or buffers. In that way, nothing could be traced to the top.

The Canada/USA Organized Crime Threat Assessment [251] seems to be inspired by the alien conspiracy theory as well. In the threat assessment from 2006, key findings are listed as follows:

- Asian Organized Crime (AOC) groups are distinguished by a high level of criminal entrepreneurship. They use both personal relationships and specific business and technological skills to maximize profit.
- AOC is active throughout Canada and the USA, from major metropolitan areas and their suburbs to isolated rural communities.
- Over the past decade, pre-existing underground economies of the Former Soviet Union (FSU) and its satellite states have transformed into fully realized transnational organized crime syndicates.
- Increasingly, Russian organized crime is characterized by fluid, cellular-type structures. Senior members/associates of Russian criminal groups appear to recognize and accept the hegemony of a single "criminal authority" who plays an important role in dispute resolution, decision-making, and the administration of criminal funds.
- Italian Organized Crime/La Cosa Nostra (IOC/LCN) is the most mature form of organized crime in both Canada and the USA. Its ability to form alliances with and co-opt other organized crime groups gives it global influence.
- In both Canada and USA, IOC/LCN is distinguished by its strict, vertically integrated, hierarchical structure. The resulting discipline and efficiency permit these groups to focus resources and maximize profit.
- African criminal enterprises are engaged in a variety of low- and mid-level criminal activities, which include a number of financial fraud schemes.
- Albanian criminal groups are engaged in a range of cross-border criminal activity, including drug smuggling and money laundering.
- US authorities have reported a significant decrease in seizures and availability of Canadian pseudo-ephedrine. This development is attributable to join Canada/USA law enforcement efforts and recent changes to legislation governing the sale of pseudo-ephedrine and ephedrine for export.
- Expanding financial, telecommunications, trade, and transportation systems that support global economies also provide abundant opportunities for criminal exploitation. Identity theft, money laundering and Internet fraud are a few of the financial crimes that are growing in scale, scope, and sophistication.

- While there are few concrete linkages between Canadian and USA gangs, many street gangs appear to be evolving into significant criminal enterprises with international implications.
- Globally, human trafficking and migrant smuggling are the third largest source of revenue for organized crime, after drugs and arms trafficking. Women and children are particularly vulnerable to this form of exploitation.
- Middle Eastern/Southwest Asian criminal enterprises are typically loosely organized theft or financial fraud rings that increasingly use small, legitimate cash businesses to facilitate their activities.

3 Knowledge Management in Policing

Organized crime by criminal organizations is not a new phenomenon. Felsen and Kalaitzidis [253] describe historical cases such as piracy, slavery, and opium smuggling. Piracy is a robbery committed at sea. The earliest documented incidences of piracy are the exploits of the Sea Peoples who threatened the Aegean in the 13th century BC. The most famous and far-reaching pirates in medieval Europe were the Vikings, warriors, and looters from Scandinavia. They raided the coasts, rivers, and inland cities of all Western Europe as far as Seville.

Like slavery and piracy, smuggling has existed throughout history by criminal organizations of different sizes. Smuggling arises because of different laws and regulations that govern markets across borders. Whenever the flow of a commodity is controlled or prohibited by one state, it creates an environment that favors profits through smuggling [253].

To fight organized crime and police criminal business enterprises, police officers need knowledge that is determined by their role or duties [207].

> The level of knowledge required by police staff will be determined by the specific role they perform or duties, to which they are assigned. Staff profiling is a means of conducting a gap analysis. This analysis helps to determine the levels of staff knowledge required to meet organizational needs (in line with NIM) and also to assist with succession planning and the need for knowledge to be maintained.

3.1. The Need for Knowledge in Policing

Knowledge management is important and often critical in policing. Combating fraud and financial crime is an interesting example, where

financial intelligence and interaction between public and private sectors are required. Identifying, reporting, and investigating suspected fraud and suspicious financial operations are essential for the effectiveness of anti-fraud measures and the protection of financial interests. This process, which can result in asset confiscation and prosecution, requires reliable intelligence, often received from reports on suspicious transactions made by the business sector (banks, intermediaries, notaries, audit firms, etc.) to financial intelligence units. At a conference on combating fraud and financial crime hosted by the Academy of European Law [243] several issues related to financial intelligence and interaction between public and private sectors were discussedas follows.

- What are the practical results of the application of anti-money laundering legislation?
- What are the new trends and developments in the field of financial intelligence based on information from anti-money laundering agencies?
- How can financial intelligence help prevent financial crime in the first place?
- How is cooperation between financial intelligence units and other authorities developing?
- Is there a role for customs authorities in combating underground banking, and enforcing cash controls and other measures?
- Are there benefits to be drawn from wider intelligence, such as the analysis of trade data in order to identify trade-based money laundering?

Through the experience of national EU and international experts, the roles of private and public sectors in terms of handling requests, safeguarding information, and other aspects of the financial intelligence-gathering process were discussed at the conference [243]. Intelligence provided by financial intelligence units is today an essential tool for investigation agencies in fulfilling the official mandate to fight fraud in organized crime, ensuring accuracy and relevance of the information received, disseminated, and processed for different user groups, such as criminal police.

The need for knowledge in policing will be exemplified in the following by criminal money management. In December 2005, the European Union commissioned the EDGE project on criminal financing. This project was a report on the disguise or laundery of illegally derived money; or as defined by the project team, it is more accurately about criminal money management (CMM).

The term CMM is presented in the final report of the EDGE project as the link and cutting edge between profit-oriented crime and terrorism. Furthermore, the term profit-oriented crime is viewed as any money derived from the various activities of what has academically been considered as related yet different fields of study into organized crime, white collar, and gang crime [237]. The link with terrorism of CMM relates to the extent to which legal and/or crime money is used to finance terrorist attacks and activities.

The EDGE project identified 20 influential factors that impact to varying degrees on CMM. These factors were defined and given projection weightings by the experts involved in the EDGE project as to the relative impact of these factors occurring in the foreseeable future, up to and until the year 2012, on the world stage.

Each of these influential factors and the experts' relative projections are presented and discussed below. These factors are presented as a way of summarizing a number of the themes on criminal financing involved in organized crime as well as foreshadowing a range of other issues connected to crime financing in general. The factors are mentioned below [237].

(1) Global Migration—significant increase (70% projection). The movement of people across and between countries will significantly increase in near future as a result of increasing birth rates, social inequalities, and worldwide climate changes.

(2) Criminal Underground Markets—substantial increase (80% projection). Criminal underground markets will substantially expand due to increasing demand for illegal goods and services that are driven by globalized economy and global social disparity between rich and poor countries.

(3) Political Perceptions—sizeable increase (60% projection). Politicians will become increasingly aware of the huge financial impact that CMM has on their national economies and the pressure it exerts on public confidence in the financial sector as well as in the national security issues like international terrorism threats and environmental disasters.

(4) World Economy—steady increase (45% projection). The development of global trade will continue at a steady pace for a longer term. This projection takes into account the occasional market corrections and fluctuations that occur from time to time on the world economy. Hence, as global trading increases, so does crime development in terms of expanding criminal markets and as a consequence money laundering or the more accurate term— criminal money management.

(5) International Movement of Goods, Services, and Values—substantial increase (80% projection). In line with the steady development of the world economy into a borderless global community, or at the very least more liberalized and hence porous border control mechanisms, there is a corresponding increased flow of goods, services, and values across the international landscape. Such a substantially increasing international movement of goods, services and values creates multiple opportunities for criminal entrepreneurs to use a wide variety of means for the transportation and distribution of their illegal products and activities, in particular people and drug trafficking.

(6) Development of Extremism—extensive increase (90% projection). Several factors on the global horizon—social and economic inequalities, difficult democratization process in Afghanistan, Iraq, and the Middle East, increasing racial segregation in many countries and cities particularly in Europe—make extremist in their various forms, especially politically and religiously inspired extremism, increasing likely and extensive in the foreseeable future.

(7) Flexibility of Criminal Actors—significant increase (70% projection). Criminals who are profit-oriented are quick to respond to and exploit new business opportunities resulting from new technologies, new products and new markets. Also the movement in organized crime trends is away from the more traditional notions of hierarchical structures like the Italian mafia to more transnational networks and loose alliances of criminal groups working together for particular criminal operations. Such criminal flexibility will present new increasing challenges for policing international security.

(8) Corruption Development—moderate increase (40% projection). Corruption is a major issue for police and security services worldwide because of the vast amount of money available to organized crime groups to bribe and corrupt police and public officials. This is especially significant in developing countries where law enforcement is weak and police are not well paid. Hence, corruption as a strategy used by organized crime to further their business aims will continue to increase at a moderate rate in the foreseeable future.

(9) Development of Criminal Upper World Markets—moderate increase (45% projection). Criminal businesses exist in an underworld market and work as a black economy. The movement by the criminal underworld into upperworld markets via legal business enterprises holds significant advantages to them. That is by using such enterprises through which

organized criminals can launder their illegally derived money, reinvest laundered money, and also facilitate other criminal activities. For example, this can happen through product piracy in the IT area, and construction companies can undertake fraudulent contracts and so forth.

(10) Citizen's Loyalty—stable (60% projection). This factor is considered as an important crime-enabling influence. That is, if citizens care little about the financial burden that CMM places on the legitimate economy of their country, then there will be little incentive by politicians and the government of the day to pass new laws and aggressively enforce them and proactively seek out and prosecute profit-oriented criminality. It is projected that studies of the current level of citizen acceptance of laws and legal regulations related to profit-oriented crimes will remain relatively stable for the near future at around 60%.

(11) Influence of Media—substantive increase (100% projection). The media is a powerful shaper of opinion and beliefs. Hence, its influence will continue to be a central and substantive factor for better or worse in the field of CMM.

(12) Social Polarization—substantive increase (100% projection). The global distribution of income in terms of inequalities between countries and continents, as well as disparities of income in individual countries and regions, is growing significantly. Hence, there is a global trend towards an increasing and sharply rising gap between the rich and the poor. Such a global bifurcation into rich and poor results in social polarization and as a consequence opens up substantial opportunities for criminal markets to exploit this income gap.

(13) Development of International Standards for combating "CMM"— moderate increase (60% projection). Further development towards internationally accepted and enforceable global standards of a high quality and easily understandable nature with regard to national and international CMM is expected to continue at a moderate rate in the near future. Clearly, the influence of other factors like global migration, political perceptions, citizen's acceptance of the need for new CMM type laws, and the media will effect considerably the projected rate in terms of the speed of development of this factor.

(14) Digital Development—substantial increase (80% projection). The rapid development in the digital world of new technologies in relation to money management strategies will offer substantial new opportunities for profit-oriented criminality. New electronic means of money transfer and

management like e-payment online systems, for example paypal, e-gold, e-dinar, and mobile transfer systems using cell phones and other electronic devices make it easier, faster, and most importantly for criminals, more anonymous, to engage in CMM.

(15) Misuse of New Technologies—significant increase (70% projection). The diversity of new technologies in terms of a wide range of media—computerized word, image, film, and sound files and formats—will also exponentially open up new opportunities for criminal misuse. It is likely that other types and new forms of profit-oriented crime will emerge that will involve not just traditional organized crime activities but also white-collar criminality and especially large-scale criminal frauds.

(16) National & International Cooperation—stable (60% projection). The level of information sharing and collaboration between national and international law enforcement agencies has considerably increased since the world changing events of 9/11 and the advent of a new wave of extremist terrorism. The EDGE report predicts that this will remain stable for the near future at around a 60% projection level. However, given the massive slipups by police and intelligence agencies prior to 9/11, there is no guarantee that this situation of knowledge sharing as opposed to just sharing information has substantially increased to match the size of the threat not only from terrorism by also but the growth of CMM. Clearly, this projection may need to be revised in the future.

(17) Management of Natural Disasters—moderate increase (60% projection). Natural disasters present profited-oriented criminals with evolving situations to exploit donated funding opportunities in a range of ways. The Asian tsunami and hurricane Cathrina in New Orleans are good examples of how organized criminal groups can reap huge amounts of donated money into criminal channels. Hence, this projection indicates that a moderate increase should be expected in how well criminal groups can be in getting organized to respond to natural disaster in respect of CMM strategies for this type of event.

(18) Development of Education—stagnations (50% projection). A lack of educational opportunities is often associated with the onset of criminal behavior as a person's future prospects in the legal-economic context to earn a reasonable living can be sometimes severely curtailed. Therefore, the appeal to engage in profit-oriented crime is enhanced for individuals with little future-earning capacity.

Alternately, well-educated professionals can be corrupted through greed to use their skills to either engage in or assist in profit-oriented

crimes. Either way, education plays a vital role in both the quantity and quality of future crime, especially crimes that have to do with CMM.

Furthermore, training law enforcement agencies is to remain educationally competent in dealing with highend crimes like sophisticated frauds, cyber crimes, and the like is a constant challenge. Hence, the EDGE experts' projection is that the overall education level for countries will remain constant in the medium time for at least the next 5 years. Thus no significant changes to the status quo are expected in the realm of education for either criminals or law enforcement agencies.

(19) Conflicts of Interests—moderate convergence (45% projection). The world of finance is full of conflicting interests that manifest themselves politically, socially, culturally, as well as economically. Thus it is a substantial challenge to law enforcement agencies working in the CMM field to establish a holistic, well-integrated, global plan of attack on CMM. The multiplicity of interdependences, sociocultural and geopolitical, makes a moderate convergence of views towards such a holistic global agenda on CMM, the only likely outcome in the foreseeable future.

(20) Non-Government Organizations (NGO's)—substantive increase (100% projection). The non-government sector occupies a central location in the global economy as it is often the case that NGOs are able to respond more rapidly and with more flexibility to changes in global conditions than the more bureaucratic instruments and agencies of government. Hence, the influence of NGOs is highly likely to rise substantially especially when global conditions are in a state of flux or suffering from environmental shocks.

To conclude, these 20 influential factors involved in CMM should not be considered in isolation. Each is linked in multiple ways and at multiple levels and therefore will have multiple realizations in how both profit-oriented criminals and law enforcement agencies deal with CMM. Which side is winning in this fight about CMM will unfold in the future. But one thing is certain: the role of criminal finance will be central in this fight against organized crime.

Policing is normally left to law enforcement authorities in a region or nation. However, policing sometimes occurs in the private sector, such as corporate policing in the case of press leak from Hewlett Packard's board of directors [57].

When Hewlett Packard (HP) announced in September 2006 that its Board Chairman, Patricia Dunn, had authorized HP's security department to investigate a suspected Board-level press leak

and that the investigation included tactics such as obtaining HP Board members' and reporters' telephone records through false pretenses (conduct known as "pretexting"), observers vehemently condemned the operation as illegal and outrageous. In congressional testimony, however, Dunn defended the investigation as "old fashioned detective work." Although Dunn would later claim that she was unaware of key aspects of the investigation, her description was not so far off. The police routinely rely on deception to investigate and apprehend wrongdoers.

Deception is an activity where someone is to believe something that is not true. In law enforcement, deception in overt contacts is applied to extract information from witnesses and suspects. Deception is in direct tension with the common norms associated with corporate governance, loyalty, trust, and transparency. Despite the risk of subsequent liability, Baer [57] argues that corporations increasingly employ surveillance and undercover investigations and deceptive techniques in interrogations.

3.2. Police Forces as Knowledge Organizations

Knowledge organization has emerged as the dominant structure of both public and private organizations in the transition from an industrial to a knowledge society [62]. Knowledge organization in the management sciences is concerned with structures within which knowledge workers solve knowledge problems [101, 113, 62, 147, 173].

There are many definitions of knowledge. Nonaka et al. [95] describe it as a justified true belief. Definitions of organizational knowledge range from a complex, accumulated expertise that resides in individuals and is partly or largely inexpressible to a much more structured and explicit content. There are also several classifications of knowledge, for example, far, explicit, embodied, encoded, embedded, event, procedural, and common. Knowledge has long been recognized as a valuable resource for the organizational growth and sustained competitive advantage, especially for organizations competing in uncertain environments. Recently, some researchers have argued that knowledge is an organization's most valuable resource because it represents intangible assets, operational routines, and creative processes that are hard to imitate [176]. However, the effective management of knowledge is fundamental to the organization's ability to create and sustain competitive advantage.

Knowledge management research has described organizational knowledge flows in terms of the knowledge circulation process, consisting of five

components: knowledge creation, accumulation, sharing, utilization, and internalization. Of these five parts, the knowledge sharing process is what this book focuses on. Knowledge sharing within and between organizations is not a one-way activity, but a process of trial and error, feedback, and mutual adjustment of both the source and the recipient of knowledge. This mutuality in the knowledge sharing suggests that the process can be constructed as a sequence of collective actions in which the source and the recipient are involved. There are many different knowledge-sharing mechanisms: it can be informal and personal as well as being formal and impersonal. Informal mechanisms include talk, unscheduled meetings, electronic bulletin boards, and discussion databases. More formal knowledge-sharing channels include video conferencing, training sessions, organizational intranets, and databases.

A. Bennet and D. Bennet [101] define knowledge organizations as complex adaptive systems composed of a large number of self-organizing components that seek to maximize their own goals but operate according to rules in the context of relationships with other components. In an intelligent complex adaptive system, the agents are the people. The systems (organizations) are frequently composed of hierarchical levels of self-organizing agents (or knowledge workers), which can take the forms of teams, divisions, or other structures that have common bonds. Thus while the components (knowledge workers) are self-organizing, they are not independent from the system they comprise (the professional organization).

Knowledge is often referred to as information combined with interpretation, reflection, and context. In cybernetics, knowledge is defined as a reducer of complexity or as a relation to predict and to select those actions that are necessary to establishing a competitive advantage for organizational survival. That is, knowledge is the capability to draw distinctions, within a domain of actions [56]. According to the knowledge-based view of the organization, the uniqueness of an organization's knowledge plays a fundamental role in its sustained ability to perform and succeed [172].

According to the knowledge-based theory of the firm, knowledge is the main resource for a firm's competitive advantage. Knowledge is the primary driver of a firm's value. Performance differences across firms can be attributed to the variance in the firms' strategic knowledge. Strategic knowledge is characterized by being valuable, unique, rare, non-imitable, non-substitutable, non-transferable, combinable, and exploitable. Unlike other inert organizational resources, the application of existing knowledge has the potential to generate new knowledge [265].

Inherently, however, knowledge resides within individuals and, more specifically within the employees who create, recognize, archive, access,

and apply knowledge in carrying out their tasks [70]. Consequently, the movement of knowledge across individual and organizational boundaries is dependent on employees' knowledge-sharing behaviors [66]. Bock et al. [146] found that extensive knowledge sharing within organizations still appears to be the exception rather than the rule.

The knowledge organization is very different from the bureaucratic organization. For example, the knowledge organization's focus on flexibility, and customer response is very different from the bureaucracy's focus on organizational stability and the accuracy and repetitiveness of internal processes. In the knowledge organization, current practices emphasize using the ideas and capabilities of employees to improve decision-making and organizational effectiveness. In contrast, bureaucracies utilize autocratic decision-making by senior leadership with unquestioned execution by the workforce [113].

In knowledge organizations, transformational and charismatic leadership is an influential mode of leadership that is associated with high levels of individual and organizational performance. Leadership effectiveness is critically contingent on, and often defined in terms of, leaders' ability to motivate followers toward collective goals or a collective mission or vision. [40].

In the knowledge society, knowledge organizations are expected to play a vital role in local economic development. For example, knowledge institutions such as universities are expected to stimulate regional and local economic development. Knowledge transfer units in universities such as Oxford in the UK and Grenoble in France are responsible for local and regional innovations [147].

Uretsky [173] argues that the real knowledge organization is the learning organization. A learning organization is one that changes as a result of its experiences. Under the best of circumstances, these changes result in performance improvements. The phrases knowledge organization and learning organization are usually (but not necessarily) used to describe service organizations. This is because most, if not all, of the values of these organizations come from how well their professionals learn from the environment, diagnose problems, and then work with clients or customers to improve their situations. The problems with which they work are frequently ambiguous and unstructured. The information, skills, and experience needed to address these problems vary with work cases. A typical example is detectives in police investigations.

Similarly, A. Bennet and D. Bennet [113] argue that learning and knowledge will have become two of the three most important emergent characteristics of the future world-class organization. Learning will be

continuous and widespread, utilizing mentoring, classroom, and distance learning and will likely be self-managed with strong infrastructure support. The creation, storage, transfer, and application of knowledge will have been refined and developed such that it becomes a major resource of the organization as it satisfies customers and adapts to environmental competitive forces and opportunities.

The third characteristic of future knowledge organizations will be that of organizational intelligence. Organizational intelligence is the ability of an organization to perceive, interpret and respond to its environment in a manner that meets its goals while satisfying multiple stakeholders. Intelligent behavior may be defined as being well prepared, providing excellent outcome-oriented thinking, choosing appropriate postures, and making outstanding decisions. Intelligent behavior includes acquiring knowledge continuously from all available resources and building it into an integrated picture, bringing together seemingly unrelated information to create new and unusual perspectives and to understand the surrounding world [113].

In our context of policing and law enforcement, "intelligence" has another meaning as well. Brown [191] define intelligence in this context as follows.

Intelligence is information, which is significant or potentially significant for an enquiry or potential enquiry.

What establishes information as intelligence is that it is a subset of information defined by the special quality of being significant and relevant. If information is significant, it has value and relevance. Analysis does not create intelligence; it merely discovers, attributes, and refines it.

According to A. Bennet and D. Bennet [101], designing the knowledge organization of the future implies development of an intelligent complex adaptive system. In response to an environment of rapid change, increasing complexity, and great uncertainty, the organization of the future must become an adaptive organic business. The intelligent complex adaptive system will enter into a symbiotic relationship with its cooperative enterprise, virtual alliances, and external environment, while simultaneously retaining unity of purpose and effective identification and selection of incoming threats and opportunities.

In the knowledge organization, innovation and creativity are of critical importance. The literature on creativity provides a view of organizing for innovation by focusing on how individuals and teams come to shape knowledge in unique ways. Innovation consists of the creative generation of a new idea and the implementation of the idea into a valuable product,

and thus creativity feeds innovation and is particularly critical in complex and interdependent work. Taylor and Greve [164] argue that creativity can be viewed as the first stage of the overall innovation process.

Innovative solutions in the knowledge organization arise from diverse knowledge, processes that allow for creativity, and tasks directed toward creative solutions. Creativity requires application of deep knowledge because knowledge workers must understand the knowledge domain to push its boundaries. Team creativity likewise relies on tapping into the diverse knowledge of team members [164].

Within knowledge organizations, we often find communities of practice. Brown and Duguid [194] argue that for a variety of reasons, communities of practice seem a useful organizational subset for examining organizational knowledge as well as identity. First, such communities are privileged sites for a tight, effective loop of insight, problem identification, learning, and knowledge production. Second, they are significant repositories for the development, maintenance, and reproduction of knowledge. Third, community knowledge is more than the sum of its parts. Fourth, organizational ability to adapt to environmental change is often determined by communities of practice.

3.3. Organized Crime Investigations

In recognition of the limitations of traditional law enforcement methods in dealing with organized crime and corruption, many governments have granted more extensive powers to their police services and created inquisitorial commissions equipped with special coercive powers. In order to be involved in the effective exercise of these powers or to represent those who are the subject of such exercise, investigators and lawyers need to understand the issues of the law of evidence that arises in this context.

The aim of such step is threefold. First, it will assist investigators and other professionals to appreciate the impact of rules of evidence in this specific context. Second, it helps to understand how these new powers can be more effectively exercised. Third, it will inform those representing persons who are the subject of such exercise on how best they can protect the rights of their clients.

On the successful completion of learning, skilled investigators will be able to demonstrate the following points:

- knowledge and understanding of the rules of evidence and special coercive powers, which apply in this context;

- analysis and evaluation of the effect of these rules of evidence and special coercive powers;
- appreciation of the strategies needed to make full and effective use of these powers;
- understanding of the manner in which the rights of those who are the subject of such powers can be protected.

This learning is concerned with procedural fairness during an investigation, the determination of relevance during an investigation, the privilege against self-incrimination and the circumstances, and the extent to which it can be overridden. Furthermore, it is concerned with the use of compelled answers, indemnified witnesses, induced statements, immunity and derivative immunity, discovery and disclosure during an investigation and during court proceedings, public interest immunity, telephone intercept and surveillance device product, and the use of digital evidence proving possession and continuity.

We consider police investigations as knowledge work. According to Brodeur and Dupont [190] the word "investigation" is inescapably associated with knowledge work.

3.4. How Police Organizations Work

Traditionally, police organizations have been bureaucratic, quasi-military organizations, rather than being open and creative knowledge organizations. Police personnel face some of society's most serious problems, they often work in dangerous settings, and they are typically expected to react quickly, and at the same time correctly. They must adapt to an occupation in which one moment may bring the threat of death, while other extended periods bring routine and boredom. They are expected to maintain control in chaotic situations involving injustice, public apathy, conflicting roles, injuries, and fatalities. Yet they are expected by both the public and their peers to approach these situations in an objective and professional manner, to be effective decision makers and independent problem solvers while working in a system that encourages dependency by its quasi-military structure [44].

The purpose of police is preventing crime before taking place, arresting criminals and bringing them before justice and maintaining security, stability, order, public safety, lives, honors and properties. Given this purpose, as an example, Dubai Police [234] has formulated the following vision.

We are determined to being a crime deterrent force, standing up to criminals and outlaws, maintaining human rights and freedoms, providing excellent services to our customers, achieving institutional distinction through applying internal excellence models, promoting our performance constantly, utilizing our capabilities and resuming prosperous cooperation with the public and partners under an efficient leadership that promotes creativity and innovation.

The values of the police force in Dubai include: honesty and loyalty, integrity and transparency, justice and fairness, work proficiency, brotherhood and cooperation, propriety and good manners, acknowledgment and rewarding individual and group contributions, and protecting, respecting and maintaining human rights.

Functionally and organizationally, a police station is the basic unit of police administration in most countries, through which both crime and non-crime duties are discharged. Crime duties denote all those jobs which the police perform in crime investigation and in preparing prosecution documents. Non-crime duties denote all kinds of duties other than those directly related to crime investigation. In India, community policing, rescue and rehabilitation, prevention of abuse at public places, and deployment during festivals are some examples of non-crime jobs of the police [86].

In fighting organized crime, the following criminal markets were EU priorities for 2007 [218]:

- drug trafficking, especially in synthetic drugs;
- smuggling and trafficking in human beings, especially ulinked to illegal immigration;
- fraud, especially in the area of highly taxed goods and Value Added Tax carousels;
- Euro counterfeiting;
- commodity counterfeiting and intellectual property theft;
- money laundering.

Policing is believed to be a demanding, stressful occupation with a macho culture. As such, it is often assumed that police work is more difficult for women. In an exploratory study, Burke et al. [202] compared job demands, work attitudes and outcomes, social resources and indicators of burnout and psychological health of male and female police officers in Norway. Few differences were found in job demands, but male officers experienced more autonomy. The two groups were generally similar on

work attitudes, work and career satisfactions, social resources and psychological health. Female police officers did indicate more psychosomatic symptoms.

Wuestewald and Steinheider [184] argue that shared leadership through empowerment represents the future of police organizations. They report that some police agencies have experimented with various aspects of employee participation. One such agency is the Broken Arrow Police Department (BAPD) (Okla, USA). The BAPD employs 164 full-time employees and provides a full spectrum of police services to a metropolitan community of 91 000 in northeastern Oklahoma. Since 2003, the BAPD leadership team incorporates frontline personnel into decision-making processes of the department. Comprising 12 individuals representing the labor union, management, and most of the divisions, ranks, and functions in the department, the leadership team's bylaws established it as an independent body, with authority to effect change and make binding decisions on a wide range of policy issues, working conditions, and strategic matters.

To fight organized crime and criminal organizations more effectively, police authorities will need to restructure their activities in terms of knowledge management and empowerment of detectives and other knowledge workers. New management thinking in police organizations will search for talent and success in creating safe societies [174].

3.5. How Police Investigations Work

An investigation is an effective search for material to bring an offender to justice. Knowledge and skills are required to conduct an effective investigation. Investigative knowledge enables investigators to determine if a given set of circumstances amounts to a criminal offence, to identify the types of material that may have been generated during the commission of an offence and where this material may be found. It also ensures that investigations are carried out in a manner, which complies with the rules of evidence, thereby increasing the likelihood that the material gathered will be admitted as evidence.

Knowledge assists investigators to make effective and accountable decisions during an investigation. It enables them to locate, gather, and use the maximum amount of material generated by the commission of an offence to identify and bring offenders to justice.

Centrex [206] has outlined the knowledge that investigators require to conduct competent criminal investigation. There are four areas of investigative knowledge required to conduct an effective investigation, these

are the legal framework, characteristics of crime, national and local force policies, and investigative skills.

Firstly, all investigators must have a current and indepth knowledge of criminal law and the legislation, which regulates the process of investigation. Next, investigators need to understand the characteristics of crime. Crime can be placed into three broad categories: property crime, crimes against the person, and crimes against society. An examination of the types of crime in each category shows that they vary widely in terms of the behaviors involved, the types of victims, the motives of offenders, the methods used to commit the crime, and the degree of planning involved. The differences between crimes are significant for investigators because the circumstances in which crimes are committed determine the volume and distribution of the material available for them to gather.

The third area of investigative knowledge is national and local force policies. The police service is a complex organization with its procedures and resource management. Many of these policies have a direct bearing on the conduct of investigations, and investigators should have knowledge of these that are relevant to the type of investigations they are involved in.

Finally, investigative skills are required. Investigations should be conducted with integrity, commonsense and sound judgment. Actions taken during an investigation should be proportionate to the crime under investigation and take account of local cultural and social sensitivities. The success of an investigation relies on the goodwill and cooperation of victims, witnesses and the community.

Although investigators can acquire knowledge from formal training courses and the literature that exists on criminal investigation, they also need practical experience of investigations to underpin this knowledge. Centrex [206] argues that investigators should never rely on experience alone. This is because of the following reasons: experience is unique to the individual; people learn at different speeds; and each will learn something different from the process.

Effective practice is generally taken to mean simply what works, but often examples of effective practice are not detailed enough for practitioners to use successfully. Practitioners do not just need to know what works, but also how and why something works if they are to understand and use the information effectively [220]. In addition to know-what, there is a need for know-how, and know-why [3].

In Table 3.1, a total of twelve organized crimes in Norway are classified according to knowledge categories and crime characteristics.

TABLE 3.1. Knowledge categories and dimensions of 12 organized crime cases in Norway.

Knowledge categories	Knowledge dimensions			
	Identification	Damage	Reason	Connection
Activity knowledge	Credit card fraud: *import and export of credit cards for illegal use*	Trafficking: *women forced to sex*	Doping: *illegal drugs*	Money fraud: *illegal income statements to get bank loans*
Structural knowledge	Albanians: *same ethnic background*	Cars: *stolen cars are sold in Eastern Europe*	Documents: *false identification papers are produced for terrorists*	Rents: *legal rent for illegal activities*
System knowledge	Narcotics: *cars on the road all the time with narcotics in spare wheels*	Somaliens: *leakage will be punished*	Homicide: *murders on demand*	Money laundering: *stocks sold at high prices to stockbroker*

For example, *Albanians* might be understood as criminals with the same ethnic background, where law enforcement needs *structural knowledge* about structures within which Albanians work, to succeed in *identification* of the criminal organization, as illustrated in Table 3.1. Ruggiero [130] provides a piece of structural knowledge about Albanians, when he says that the involvement of Albanians in drug trafficking across Europe has been explained by their ability to exploit access to suppliers in Turkey and the Caucasian republics, their simultaneous access to the Adriatic, and their own established presence in Switzerland, Italy, and Germany. Drugs refineries have been discovered in Macedonia, Kosovo, and Albania. The Albanian port of Durrës is the destination of hundreds of vehicles for the transportation and bartering of heroin and other products through the Balkans and via the ferry to Italy. This kind of structural knowledge is important when Norwegian senior investigating officers try to collect evidence against Albanian drug dealers in Norway.

Police investigation is knowledge work. Investigation is the police activity concerned with (1) the apprehension of criminals by gathering of

evidence leading to their arrest, and (2) the collection and presentation of evidence and testimony for the purpose of obtaining convictions. According to Smith and Flanagan [149], the process begins with an initial crime scene assessment where sources of potential evidence are identified. The information derived from the process then has to be evaluated in order to gauge its relevance to the investigation. During the next stage, the information is interpreted to develop inferences and initial hypotheses. The senior investigating officer can then develop this material into appropriate and feasible lines of enquiry. The SIO will have to prioritize actions, and to identify any additional information that may be required to test that scenario. As more information is collected, this is the feedback into the process until the objectives of the investigation are achieved. Providing that a suspect is identified and charged, the investigation then enters the post-charge stage, where case papers are compiled for the prosecution. Subsequently, the court process will begin.

Police investigation units represent a knowledge-intensive and time-critical environment [211, 25]. Successful police investigations are dependent on efficient and effective knowledge sharing [150]. Furthermore, Lahneman [55] argues that successful knowledge management in law enforcement depends on developing an organizational culture that facilitates and rewards knowledge sharing [78, 170].

In this context, detectives as knowledge workers are using their brains to make sense of information. Knowledge is often defined as information combined with interpretation, reflection and context [124]. This combination takes place in the brains of detectives.

3.6. Knowledge Management Matrix for Intelligence Policing

The types of knowledge involved in the practice of law enforcement can be categorized as administrative, policing, legal, procedural, and analytical knowledge [3].

- *Administrative knowledge* is knowledge about the operations of the crime areas, offices, services, locations, uniforms, budgets, and statistics.
- *Policing knowledge* is knowledge about actions, behavior, procedures, and rules.
- *Legal knowledge* is knowledge of the law and court rulings.
- *Procedural knowledge* is knowledge of evidence and rights of suspects.
- *Analytical knowledge* is knowledge of investigative behavior, including investigative thinking styles.

TABLE 3.2. Knowledge matrix to identify knowledge needs in police intelligence.

Categories	Levels		
	Core knowledge	Advanced knowledge	Innovative knowledge
Administrative Knowledge			
Policing Knowledge			
Legal Knowledge			
Procedural Knowledge			
Analytical Knowledge			

Furthermore, distinctions can be made between core, advanced, and innovative knowledge. These knowledge categories indicate different levels of knowledge sophistication [3].

- *Core knowledge* is that minimum scope and level of knowledge required for daily operations.
- *Advanced knowledge* enables an intelligence unit to be competitively viable.
- *Innovative knowledge* is the knowledge that enables the intelligence unit to take the lead in the police district or force.

To identify knowledge needs in policing, we can combine knowledge levels with knowledge categories. Core knowledge, advanced knowledge, and innovative knowledge are combined with administrative knowledge, policing knowledge, legal knowledge, procedural knowledge and analytical knowledge as illustrated in Table 3.2.

3.7. Information and Communication Technology

Law enforcement agencies need advanced knowledge about crimes and criminal organizations to fight organized crime. In addition, they need knowledge of tools for analysis of organized crime. For example, geographic information systems can help identify hotspots and simulate activities of criminal organizations.

The use of geographic information systems (GIS) by crime analysts in law enforcement is growing. In England and Wales, Weir and Bangs

[178] report that the large majority of crime analysts surveyed used GIS in their analysis. Analysis used in crime reduction and community safety can extend beyond crime data alone. Analysts make use of a large number of multiagency datasets in order to better understand crime problems and more effectively target interventions. Similarly, Johnson et al. [36] report the use of GIS in crime mapping, where they found that crime (burglary and other types) clusters in space and time.

In the USA, the Shelby, North Carolina, Police Department has built a GIS-based ComputerStatistics (CompuStat) system using ESRI ARcGIS software that is helping to lower crime rates and better share information. Map-based tools help the agency see exactly where crimes have been reported and effectively respond to events in a dynamic fashion. The department implemented ESRI software-based Crime Analysis Tools (CAT), an ArcGIS extension that analyzes crime patterns and calls for service. Viewing and analyzing incidents by crime type and on a weekly, monthly, and annual basis helps commanders comb through volumes of data stored in record management systems. They use GIS to look at district breakdowns of reported incidents, repeat calls, and areas where particular crimes have spiked above average. These analyses help district managers compare and contrast what is happening in other districts. Spatial analysis is used for all types of crimes including homicide, sexual assault, robbery, larceny, and car theft. The query results, once visualized on a map, are then shared agency-wide.

A strategic move that makes prevention, detection, and repression of organized crime more effective has to do with strengthening the technological capabilities of the police force. When Italian police launched their recent anti-Mafia strategies, funding was provided for information and communication technology in terms of an integrated system of satellite telecommunication, modern sensors located in the area, and operative interconnected control rooms [151]:

> A targeted and effective use of new technologies can be devastating to Mafia activities. "Men of honor" usually speak very little, but they cannot avoid a certain amount of crucial communication, both between themselves as well as with their victims. In the past (and often still today) the Mafia moved without anybody seeing or hearing anything, but if phone calls and conversations can be tapped and acts can be filmed, there is no need for witnesses anymore, and the work of Mafia men becomes much more difficult. As is well-known, Bernardo Provenzano—the boss of all bosses in Cosa Nostra—used an archaic medium (small slips of paper,

so-called pizzini), to avoid interception. But even small sheets need "postmen" to deliver them and postmen can be detected. Provenzano was caught in April 2006, after having spent more than 40 years on the run, because the police were able to monitor his relatives and the people who brought him clean underwear.

Another example of information and communication technology in intelligence and analysis is network analysis. Xu and Chen [185] demonstrate how network analysis might be applied by using shortest-path algorithms to identify associations in criminal networks. Effective and efficient ulink analysis techniques are needed to help law enforcement and intelligence agencies fight organized crimes such as narcotics violation, terrorism, and kidnapping.

Knowledge organizations apply knowledge management systems in their knowledge work. Several knowledge management systems support detectives. One example is geographic information systems. In Sweden, the Hobit system is a geographic occurrences and crime information system used within the Swedish police. The system gives the police an improved opportunity to map out crimes. When and where crimes are committed can be processed and sought out faster thanks to the new system.

3.8. Stages of Knowledge Management Technology

Knowledge management is concerned with simplifying and improving the process of sharing, distributing, creating, capturing and understanding knowledge. Information technology can play an important role in successful knowledge management initiatives. The extent of information technology can be defined in terms of growth stages for knowledge management systems.

Here, a model consisting of four stages is presented: officer-to-technology systems, officer-to-officer systems, officer-to-information systems, and officer-to-application systems [3].

(1) *Officer-to-technology stage. Tools for end users* are made available to knowledge workers. In the simplest stage, this means a capable networked PC on every desk or in every briefcase, with standardized personal productivity tools (word processing, presentation software) so that documents can be exchanged easily throughout a company. More complex and functional desktop infrastructures can also be the basis for the same types of knowledge support. Stage One is recognized by widespread dissemination and use of end-user tools among knowledge workers in the company. For example, lawyers in a law firm will in this stage use word processing, spreadsheets, legal databases, presentation software, and scheduling programs.

Related to the new changes in computer technology is the transformation that has occurred in report writing and recordkeeping in police investigations. Every police activity or crime incident demands a report on some kind of a form. The majority of police patrol reports written before 1975 were handwritten.

Today, officers can write reports on small notebook computers located in the front seat of the patrol unit; discs are handed in at the end of the shift for hard copy needs. Cursor keys and spell-check functions in these report programs are useful, timesaving features.

An example of an officer-to-technology system is the Major Incident Policy Document in the UK [21]. This document is maintained whenever a Major Incident Room using HOLMES system is in operation. Decisions, which should be recorded, are those which affect the practical or administrative features of the enquiry, and each entry has clearly to show the reasoning for the decision. When the HOLMES system is used, the SIO directs which policy decisions are recorded on the system.

The basic information entered into HOLMES is location of incident, data, and time of incident, victim(s), senior investigating officer, and date on which enquiry commenced. During the enquiry, which has been run on the HOLMES system, a closing report is prepared and registered as another document ulinked to a category of Closing Report. The report will contain the following information: introduction, scene, the victim, and miscellaneous.

Stage One can be labeled *end-user-tools* or *people-to-technology* as information technology provides knowledge workers with tools that improve personal efficiency.

(2) *Officer-to-officer stage. Information about who knows what* is made available to all people in the firm and to selected outside partners. Search engines should enable work with a thesaurus, since the terminology in which expertise is sought may not always match the terms the expert uses to classify that expertise. The creation of corporate directories—also referred to as the mapping of internal expertise—is a common application of knowledge management technology. Because much knowledge in an organization remains non-codified, mapping the internal expertise is a potentially useful application of technology to enable easy identification of knowledgeable persons.

Here we find the cartographic school of knowledge management [239], which is concerned with mapping organizational knowledge. It aims to record and disclose who in the organization knows what by building knowledge directories. Often called Yellow Pages, the principal idea is to make sure knowledgeable people in the organization are accessible

to others for advice, consultation, or knowledge exchange. Knowledge-oriented directories are not so much repositories of knowledge-based information as gateways to knowledge, and the knowledge is as likely to be tacit as explicit.

At Stage Two, firms apply the personalization strategy in knowledge management. According to Hansen et al. [12], the personalization strategy implies that knowledge is tied to the person who developed it and is shared mainly through direct person-to-person contact. This strategy focuses on dialogue between individuals: knowledge is transferred mainly in personal email, meetings, and one-on-one conversations.

Electronic networks of practice are computer-mediated discussion forums focused on problems of practice that enable individuals to exchange advice and ideas with others based on common interests. Electronic networks have been found to support organizational knowledge flows between geographically dispersed co-workers and distributed research and development efforts. These networks also assist cooperative open-source software development and open congregation on the Internet for individuals interested in a specific practice. Electronic networks make it possible to share information quickly, globally, and with large numbers of individuals [176].

Communication competence is important at Stage Two. Communication competence is the ability to demonstrate skills in the appropriate communication behavior to effectively achieve one's goals. Communication between individuals requires both the decoding and encoding of messages [52]. Lin et al. [67] found that knowledge transfer depends on the completeness or incompleteness of the sender's and the receiver' information sets.

The dramatic reduction in electronic communication costs and the ease of computer-to-computer ulinkages have resulted in opportunities to create new channel structures, fuelling interest in inter-organizational systems. Inter-organizational systems are planned and managed ventures to develop and use IT-based information exchange systems to support collaboration and strategic alliances between otherwise independent actors. These systems allow for the exchange of information between partners for the purpose of coordination, communication, and cooperation.

Whilst the access to organizational information and communication of knowledge with distant colleagues through mobile technology is an emerging phenomenon in the business world, the police have a long tradition of supporting geographically distributed work through the employment of state-of-the-art mobile technologies.

The typical system at Stage Two of knowledge management technology in police investigations is the intranet. Intranets provide a rich set of tools for creating collaborative environments in which members of an organization can exchange ideas, share information, and work together on common projects and assignments regardless of their physical location. Information from many different sources and media, including text, graphics, video, audio, and even digital slides can be displayed, shared, and accessed across an enterprise through a simple common interface.

Stage Two can be labeled *who-knows-what* or *people-to-people* as knowledge workers use information technology to find other knowledge workers.

(3) *Officer-to-information stage. Information from knowledge workers* is stored and made available to everyone in the firm and to designated external partners. Data mining techniques can be applied here to find relevant information and combine information in data warehouses [152]:

> Data mining is a process of extracting nontrivial, valid, novel and useful information from large databases. Hence, data mining can be viewed as a kind of search for meaningful patterns or rules from a large search space, that is the database.

However, data mining as any other computer software has limitations Lind et al. [69].

> Whenever huge masses of personal data are stored at one place, and especially when tied to a system with the intelligence to tailor this data, there is enormous privacy risk. The idea is that strict access control surround the data. Will that be the case? We can only hope. We see a risk of abuse from corrupted personnel and from hackers or other intruders. Also, there is a risk that data be overly interpreted as true, and that end users be wrongly accused. With the ease in accessing and perhaps performing data mining on huge amounts of personal data, the risk that a police investigation might take the wrong turn is much greater.

On a broader basis, search engines are web browsers and server software that operate with a thesaurus, since the terminology in which expertise is sought may not always match the terms used by the expert to classify that expertise.

An essential contribution that IT can make is the provision of shared databases across tasks, levels, entities, and geographies to all knowledge workers throughout a process [239]. For example, Infosys Technologies—a US: $1 billion company with over 23 000 employees and globally

distributed operations—created a central knowledge portal called KShop. The content of KShop was organized into different content types, for instance, case studies, reusable artifacts, and downloadable software. Every knowledge asset under a content type was associated with one or more nodes (representing areas of discourse) in a knowledge hierarchy or taxonomy [265].

Sifting though the myriad of content available through knowledge management systems can be challenging, and knowledge workers may be overwhelmed when trying to find the content most relevant for completing a new task. To address this problem, system designers often include rating schemes and credibility indicators to improve users' search and evaluation of knowledge management system content [114].

An enterprise information portal is viewed as a knowledge community. Enterprise information portals are of multiple forms, ranging from Internet-based data management tools that bring visibility to previously dormant data so that their users can compare, analyze, and share enterprise information to a knowledge portal, which enables its users to obtain specialized knowledge that is related to their specific tasks.

Electronic knowledge repositories are electronic stores of content acquired about all subjects for which the organization has decided to maintain knowledge. Such repositories can comprise multiple knowledge bases as well as the mechanisms for acquisition, control, and publication of the knowledge. The process of knowledge sharing through electronic knowledge repositories involves people contributing knowledge to populate repositories (e.g., customer and supplier knowledge, industry best practices, and product expertise) and people seeking knowledge from repositories for use.

Individuals' knowledge does not transform easily into organizational knowledge even with the implementation of knowledge repositories. According to Bock et al. [146], individuals tend to hoard knowledge for various reasons. Empirical studies have shown that the greater the anticipated reciprocal relationships are, the more favorable the attitude toward knowledge sharing will be.

In Stage Three, firms apply the codification strategy in knowledge management. According to Hansen et al. [12], the codification strategy centers on information technology: knowledge is carefully codified and stored in knowledge databases and can be accessed and used by anyone. With a codification strategy, knowledge is extracted from the person who developed it, is made independent from the person and stored in form of interview guides, work schedules, benchmark data etc; and then is searched, retrieved, and used by many employees.

Two examples of knowledge management systems at Stage Three in law enforcement are COPulink and geodemographics. COPulink has a relational database system for crimespecific cases such as gang-related incidents, and serious crimes such as homicide, aggravated assault, and sexual crimes. Deliberately targeting these criminal areas allows a manageable amount of information to be entered into a database [211]. Geodemographic profiles of the characteristics of individuals and small areas are central to efficient and effective deployment of law enforcement resources. Geocomputation is based on geographical information systems.

Stage Three can be labeled *what-they-know* or *people-to-docs* as information technology provides knowledge workers with access to information that is typically stored in documents. Examples of documents are contracts and agreements, reports, manuals and handbooks, business forms, letters, memos, articles, drawings, blueprints, photographs, e-mail and voice mail messages, video clips, script and visuals from presentations, policy statements, computer printouts, and transcripts from meetings.

At Stage Three, police management gets access to electronic information that can be used for managing police performance. At this stage, sufficient information is electronically stored to apply performance management systems. An example of such a system is iQuanta in the UK, which is a web-based data analysis tool that provides its users with easy access to unified policing performance information based on common data and agreed analysis. iQuanta arose from a system developed to provide the Home Office with accurate and timely assessment of police performance at different organizational levels. The system iQuanta supports the comparison of performance in three main ways: (i) comparison with peers (similar areas elsewhere), (ii) comparison across time, and (iii) progress towards targets/direction of travel [20].

Another example from the UK is the CORA system. Crime objective results and analysis (CORA) system is implemented at the Lancashire Police for performance management. CORA provides access to crime and detection data at several organizational levels. Several comparisons and forecasts are made and presented using a variety of different graphical displays. Navigation between views and drilling into the data is a matter of on-screen button presses. Printable versions of the views have been predefined [20].

(4) *Officer-to-application stage. Information systems solving knowledge problems* are made available to knowledge workers and solution seekers. Artificial intelligence is applied in these systems. For example, neural networks are statistically oriented tools that excel at using data to classify cases into one category or another. Another example is expert systems that can

enable the knowledge of one or a few experts to be used by a much broader group of workers requiring the knowledge. Officer-to-application systems will only be successful if they are built on a thorough understanding of law enforcement.

Artificial intelligence (AI) is an area of computer science that endeavors to build machines exhibiting human-like cognitive capabilities. Most modern AI systems are founded on the realization that intelligence is tightly intertwined with knowledge. Knowledge is associated with the symbols we manipulate.

Knowledge-based systems deal with solving problems by exercising knowledge. The most important parts of these systems are the knowledge base and the inference engine. The former holds the domain-specific knowledge whereas the latter contains the functions to exercise the knowledge in the knowledge base. Knowledge can be represented as either rules or frames. Rules are a natural choice for representing conditional knowledge, which is in the form of if-when statements. Inference engines supply the motive power to the knowledge. There are several ways to exercise knowledge, depending on the nature of the knowledge. For example, backward-chaining systems work backward from the conclusions to the inputs. These systems attempt to validate the conclusions by finding evidence to support them. In law enforcement, this is an important system feature, as evidence determines whether a person is charged or not of a crime.

Case-based reasoning systems are a different way to represent knowledge through explicit historical cases. This approach differs from the rule-based approach because the knowledge is not complied and interpreted by an expert. Instead, the experiences that possibly shaped the expert's knowledge are directly used to make decisions. Learning is an important issue in case-based reasoning, because with the mere addition of new cases to the library, the system learns. In law enforcement, police officers are looking for similar cases to learn how they were handled in the past, making case-based reasoning systems an attractive application in policing.

Use of expert systems in law enforcement includes systems that attempt to aid in information retrieval by drawing upon human heuristics or rules and procedures to investigate tasks. The AICAMS project is a knowledge-based system for identifying suspects. AICAMS also includes a component to fulfill the needs for a simple but effective facial identification procedure based on a library of facial components. The system provides a capability for assembling an infinite number of possible facial composites by varying the position and size of the components. AICAMS also provides a geomapping component by incorporating a map-based user interface [211].

Another example is the Scientific Support Modelling Tool (SSMT) in the UK. This tool is aimed at enabling rapid process analysis and improvement of scientific support processes. The SSMT comprises two ulinked modules. First, the identification module covers the process from scene attendance through to generating a fingerprint or DNA match. Next, the detections module covers the steps after an identification has been generated through to detection of the crime. SSMT is a simulation tool applied to different situations, such as testing the impact of alternative scene attendance policies on resource requirements and identifying bottlenecks in the process [20].

Stage Four can be labeled *how-they-think* or *people-to-systems* where the system is intended to help solving a knowledge problem.

Information technology to support knowledge work of police officers is improving [25]. For example, new information systems supporting police investigations are evolving. Police investigation is an information-rich [249, 116] and knowledge-intensive practice [211, 139]. Its success depends on turning information into evidence. However, the process of turning information into evidence is neither simple nor straightforward. The raw information that is gathered through the investigative process is often required to be transformed into usable knowledge before its value as potential evidence can be realized [25]. Hence, in an investigative context, knowledge acts as an intervening variable in this transformative process of converting information via knowledge into evidence.

3.9. Filtration of Knowledge

Modern information systems provide police management with information about operations. ICT enables access to predefined sources and types of information. Because of the predefined nature of police systems, such systems also contribute to filtration of knowledge in the organization.

Holgersson et al. [19] explored how an information technology system might contribute to the filtration of knowledge in an organization. Filtration has an impact on the quality of decision-making and analysis, especially when information from an IT system plays a central role when compared to other sources of knowledge. The paper describes some of the consequences in an organization when knowledge filtrated by an IT system is used for decision-making and analysis. Results from street-level policing in Sweden are discussed in the article.

Individuals in an organization can interpret and describe conditions differently. Descriptions often vary between different groups of actors. In a small organization it is not unusual to find that most of the tasks are done

by the same actors. If the organization grows in size, it will be natural with a specialization. For example, there may be one or more persons working only with IT related matters.

Accordingly, the risks are obvious that separate groups interpret the organization, its goals and problems differently. The probability of such diversity in views will likely increase as the organization grows older. In a new organization, which has grown, there is a possibility that actors in different positions have been involved with most of the tasks before there was a specialization. The conditions will therefore be better in terms of different groups of actors having a similar understanding.

Information technology has received a more central and critical role in the distribution of information. It is important to see an information system in a communicative perspective. The information system might be viewed as a social agent that can be both a sender and a receiver of information. Therefore, an information system has a central role to play in terms of quality of the communication between the sender and the person who tries to interpret the information.

Output from an IT system causes often a precise and reliable impression, and it is often easier to acquire information from an IT system than to collect knowledge about an activity in other ways. These are two reasons why IT systems relatively one-sided are used to decide the outcome from a work process.

An example may illustrate our point. Organized pocket thefts in the city of Oslo were/are a problem. While 40% of the cases were solved in 2002, only 20% were solved in 2007. This is the kind of information police executives receive from the computer system. Based on this information, the attorney general concluded that police work has deteriorated. Top management in Norwegian police agreed.

At the same time, patrolling police officers find that the situation has improved. While there were 5000 pocket thefts in 2002, there were only 2000 in 2007. Hence, the number of unsolved cases dropt from 3000 (60% of 5000) to 1600 (80% of 2000). Street-level officers perceive that the situation has improved, and they are satisfied with their own work.

Patrolling officers had analyzed pocket theft patterns and found that the University Street in Oslo had particularly many thefts. They had visited restaurants and bars in that street and encouraged owners to install wardrobe and other measures to improve safety. Because of this kind of problem-oriented policing (POP), the number of pocket thefts dropped.

This kind of information never reached the executive level of Norwegian police. Instead, police executives perceived the situation even worse than just the drop into half from 40% to 20%. Because police officers
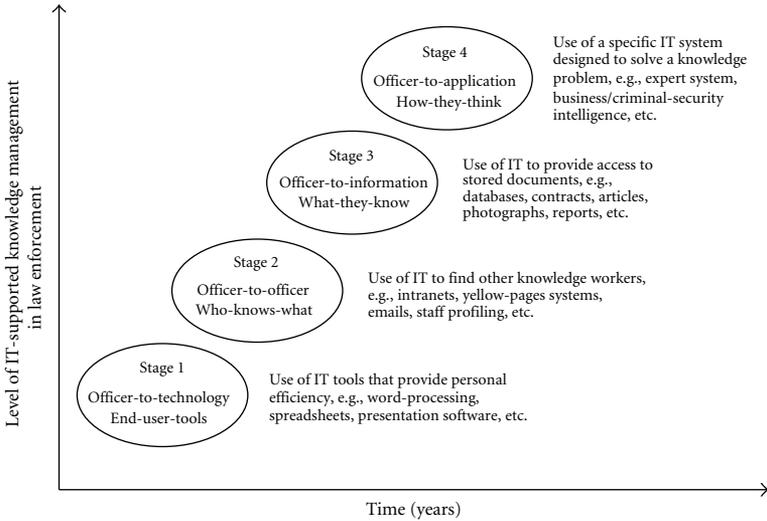
FIGURE 3.1. The knowledge management systems stage model for police intelligence.

had taken off their uniforms to analyze crime patterns in the office, to identify hot spots, Oslo newspapers started to write about the lack of visible officers in the street. As executivesare generally very worried about news in media, executives started to question why local police stations did not order officers back into the street. The message of declining crime because of POP never reached the executive floor, because such information was filtered away in ICT based reporting systems.

3.10. The Case of Social Intelligence and Investigation Service

3.10.1. This case is based on information from the website http://www.siod.nl/

In the Netherlands, we find the Social Intelligence and Investigation Service (SIOD). Fighting criminal entrepreneurship is a priority task for SIOD, who defines criminal entrepreneurship as obtaining financial-economic gains through facilitating criminal offences by delivering goods or services. This not only concerns the criminal entrepreneur who specializes in illegal activities in terms of organized crime, but also the entrepreneur who combines his role of bona fide entrepreneur with that

of criminal entrepreneurship that represent forms of organization criminality. The social disturbance resulting from criminal entrepreneurship may take the form of financial damage, but also other forms of damage for society may result from it, such as false competition and human exploitation.

The investigation process of the SIOD is intelligence led. The SIOD deals with social disturbance thematically within the chain of work and income. The SIOD chooses a particular theme, in consultation with policy directorates of the Ministry of Social Affairs and Employment. This takes place on the basis of knowledge of the type, degree, and development of criminal entrepreneurship. Next, this theme is developed into an action plan in which all investigations and external parties cooperate on this specific theme.

Since the SIOD fights criminal entrepreneurship, they invest in the development of financial and digital expertise. Based on this expertise, the service distinguishes itself as a special police force. It is the purpose of financial and digital investigation to uncover more financial damage and criminal capital and—eventually—recover it.

The SIOD makes knowledge of its employees transparent by registering information in a structured fashion in a centralized database. This should enable better use of available knowledge in the organization for investigation, policy, and analysis. Developing, retaining and sharing expertise with respect to each investigation of fraud in the social security domain is important for success.

One of the reasons for establishing a special police force within social security was that it was considered desirable to add a final approach of heavy investigation to the regular inspection, control and light investigation of entrepreneurship in organized crime. The Special Police forces Act (Wet op de BOD'en) determines the domain of the SIOD. In this act, and in the Parliamentary discussion of it, the area of activity of the SIOD is described in relation to the role of the special investigation as a part of the anti-fraud measures within the sphere of the Ministry of Social Affairs and Employment.

The domain of the SIOD concerns in principle all legislation of the Ministry of Social Affairs and Employment. This mainly concerns subjects in the fields of employee insurance schemes, social assistance (benefits and getting people back to work), and the labor market (employment of illegal aliens, temporary work agencies, and labor market subsidies). In addition, other ministry related subjects such as labor conditions belong to the domain of the SIOD.

3.11. The Case of Criminal Intelligence Service Alberta

3.11.1. This case is based on a newspaper article in the Calgary Herald in Canada entitled "Gangs ranked—Crazy Dragons head list of Alberta crime threats" by Rassel and Komarnicki [120]

At a time when Hells Angels are gathering outside Calgary to celebrate the group's 10th anniversary in Alberta, law enforcement agencies are identifying another gang—the Crazy Dragons—as the province's top criminal threat.

The Criminal Intelligence Service Alberta's annual report, obtained on Friday by the Herald, identifies 54 criminal groups of varying sophistication operating in the province.

Four groups are identified as "mid-level" threats, meaning they have demonstrated some level of sophistication and are ulinked to multiple criminal groups.

The remaining 50 were classified as "lower level" threats focused on a limited amount of activities and fewer ulinks to other criminal organizations.

"The most noticeable criminal group in Alberta—with cocaine operations throughout the province as well as in parts of British Columbia, Saskatchewan and the Northwest Territories—is known to police as the Crazy Dragons," says the report, a collection of intelligence from Alberta's law enforcement agencies.

In another passage that does not refer to the Crazy Dragons by name, the document says nearly every law enforcement agency that contributed to the report has encountered the gang.

"Among competing groups there is one that surpasses all the others with their drug products being provided in some measure to virtually every reporting city and town, even in the midst of activities by other criminal groups," the report says.

Nothing is said about any specific activity in Calgary, but police in the past have ulinked the Crazy Dragons to the deadly feud between two street gangs, Fresh off the Boat (FOB) and FOB Killers (FK).

A previous Criminal Intelligence Service Alberta report said that the Crazy Dragons may have supplied guns to one of the gangs. Violence between FOB and FK has killed nine members or associates since 2001.

This year's report said a second group, led by a Vietnamese organized crime figure, "is involved in the large-scale production of marihuana (sic) in southern Alberta."

The report bleakly predicts that the province's booming economy will allow organized crime groups to maintain their grip on the underworld while police deal with the fallout among the working poor and drug addicted.

"It is suggested the bulk of police intervention will become increasingly necessary at the street level where social network breakdowns (domestic and labor-related) as well as competition among lower level criminals will manifest themselves with greater frequency," reads the report.

The Hells Angels, meanwhile, are identified as being involved in the street-level drug trade.

The worldwide biker gang arrived in Alberta 10 years ago when it took over locally based independent gangs such as the Grim Reapers in Calgary.

Despite what history and the three chapters in Alberta say—Calgary, Edmonton, and a "Nomad" chapters based on Red Deer—Criminal Intelligence Service Alberta says that the gang has failed to make significant inroads in the province's criminal underworld.

"Without making light of their propensity for extreme violence—augmented by loyalty to the club's name—members of the Hells Angels continue to lack in criminal business savvy," the report says.

"They have proven themselves to be an available source of "muscle" either for their own endeavors or for other criminal organizations. They are preoccupied with the supremacy of their name within the criminal biker sub-culture."

The Hells Angels' Calgary chapter has suffered some highly publicized setbacks, notably having to abandon a fortified clubhouse under construction in Bowness because it violated building codes.

The chapter's then-president, Ken Szczerba, was jailed in 2001 for trying to arrange a plot to bomb the homes of Ald. Dale Hodges and a community activist involved in getting construction halted.

Nevertheless, police agencies underestimate the Hells Angels in this province at their peril as illustrated by the author of several books on the gang.

"They weren't the best and brightest of the bikers, but they're still part of an international organization and they're dangerous," said Yves Lavigne.

More than 50 Hells Angels from different chapters pulled up to the local clubhouse southeast of Calgary Friday evening as RCMP cruisers patrolled nearby roads.

Neighbor Nancy Gunn said the motorcycle gang has met at the clubhouse next door before, and she has never had any concerns.

"Rush hour traffic is worse than having a few bikes go by," she said.

Monitoring Hells Angels parties has dubious value, Lavigne added, considering they take great care to behave in public.

"When the Hells Angels socialize, they know they're under scrutiny," he said.

Although there are only three chapters in Alberta, the Hells Angels involvement in the drug trade is widespread, said Lavigne.

"Who do you think supplies Fort McMurray and Grande Prairie?"

Those boomtowns are evidencethat Alberta's robust economy has a downside, Criminal Intelligence Service Alberta says—growing demand for illegal drugs that will enrich organized crime groups and stretch police resources.

"The problems associated with harmful lifestyle choices facilitated by increased incomes may predominate law enforcement attention," the report says.

4 Intelligence Strategy Development

Strategy can simply be defined as principles, a broad-based formula, to be applied in order to achieve a purpose. These principles are general guidelines guiding the daily work to reach organizational goals. Strategy is both a plan for the future and a pattern from the past, it is the match an organization makes between its internal resources and skills (sometimes collectively called competencies) and the opportunities and risks created by its external environment. Strategy is the long-term direction of an organization. Strategy is the course of action for achieving an organization's purpose. Strategy is the pattern of resource allocation decisions made throughout the organization. Strategy is the direction and scope of an organization over the long term, which achieves advantage for the organization through its configuration of resources within a changing environment and to fulfill stakeholders' expectations [34].

When Italian police developed a new intelligence strategy against Mafia-type organized crime, the ambition was to change social conduct based on intelligence and analysis of extortionists, politicians ulinked to the Mafia, eyewitness testimony, illegal favors by white collar workers, anti-Mafia activists, and potential police collaborators [151].

> Consider a context like Sicily, Calabria or Campania. If most entrepreneurs and shopkeepers refused to pay extortionists but rather reported them to police, if citizens stopped voting for political figures who are known to be directly or indirectly ulinked to the Mafia, if eyewitnesses decided to give their testimony regardless of retaliation, if all the "white collars" (professionals, civil servants, politicians, entrepreneurs, opinion makers) avoiding favoring the Mafia in any way, if enough ordinary citizens engaged in grassroots anti-Mafia activities, and if enough Mafia men chose to collaborate

with the police and public prosecutors, then after some time the Mafia would disappear, because its members would frequently be exposed and apprehended, and the organization would lose its sources of income and eventually collapse.

Indirect actions by Italian police based on intelligence and analysis are intended to supplement and complement repressive actions. Repressive actions are aimed at discouraging people from committing crimes by punishing them afterwards while indirect actions are aimed at reinforcing and spreading attitudes and behaviors that can pose serious obstacles to the day-to-day activities of Mafia men and women [151].

Strategic criminal intelligence analysis aims to weighing a variety of crimes against each other in order to base priorities on a calculus of social harm. According to Sheptycki [140], this implies that strategic analysis attempts to compare different types of criminal activity including violence, drug distribution and consumption, intellectual property theft, car theft and burglary, smuggling of guns, child pornography, trafficking in humans, stock market fraud, and avoidance of health and safety legislation in food production.

4.1. Strategic Planning

Strategic planning represents the extent to which decision-makers look into the future and use formal planning methodologies. Planning is something we do in advance of taking action. It is anticipatory decision-making. We make decisions before actions are required. According to Mintzberg [85], planning is future thinking, it is about controlling the future, it is decision-making, and it is a formalized procedure to produce an articulated result, in the form of an integrated system of decisions. The result of strategic planning manifests itself in a strategic plan such as the document "National Strategy for Intelligence and Analysis" [109].

Zhao et al. [188] argue that:

Strategic planning in police departments represents a significant departure from a traditionally reactive orientation to one that is more proactive in nature.

This chapter belongs to the planning school of strategy, where strategy is documented as a plan. *Planning* represents the extent to which decision-makers look into the future and use formal planning methodologies. Planning is something we do in advance of taking action; it is anticipatory

decision-making. We make decisions before action is required. The focus of planning revolves around objectives, which are the heart of a strategic plan. According to Mintzberg [85], planning has the following characteristics.

- *Planning is future thinking*. It is taking the future into account. Planning denotes thinking about the future. Planning is the action laid out in advance.
- *Planning is controlling the future*. It is not just thinking about it but achieving it—enacting it. Planning is the design of a desired future and of effective ways of bringing it about. It is to create controlled change in the environment.
- *Planning is decision making*. Planning is the conscious determination of courses of action designed to accomplish purposes. Planning includes those activities which are concerned specifically with determining in advance what actions and/or human/physical resources are required to reach a goal. It includes identifying alternatives, analyzing each one, and selecting the best ones.
- *Planning is the integrated decisionmaking*. It means fitting together of ongoing activities into a meaningful whole. Planning implies getting somewhat more organized, it means making a feasible commitment around which already available courses of action get organized. This definition may seem close to the preceding one. But because it is concerned not so much with the making of decisions as with the conscious attempt to integrate different ones, it is fundamentally different and begins to identify a position for planning.
- *Planning is a formalized procedure to produce an articulated result, in the form of an integrated system of decisions*. What captures the notion of planning above all—most clearly distinguishes its literature and differentiates its practice from other processes—is its emphasis on formalization, the systemization of the phenomenon to which planning is meant to apply. Planning is a set of concepts, procedures, and tests. Formalization here means three things: (a) to decompose, (b) to articulate, and (c) to rationalize the process by which decisions are made and integrated in organizations.

Given that this is planning, the question becomes why to do it? Mintzberg [85] provides the following answers:

- organizations must plan to coordinate their activities;
- organizations must plan to ensure that the future is taken into account;
- organizations must plan to be rational in terms of formalized planning;
- organizations must plan to control.

	Model 1	Model 4
Top executives	In-depth plan model with limited application	Total implementation model
Hierarchical involvement in strategy work	Model 2	Model 3
All managers	Top leadership in charge model	Management model
	Some	All

Inter-organizational
involvement in strategy work

FIGURE 4.1. Four models for strategic planning in policing (Adapted from [188]).

Zhao et al. [188] reached the following result in a survey of strategic planning in USA police forces.

> A second dimension refers to the number of ranks involved in the strategic planning process. In some departments, only top administrators (the chief or deputy chief) were involved in the plan. Alternatively, there were law enforcement agencies in which patrol officers were expected to also fully participate in strategic planning. Hierarchical involvement reflects the extent of employee involvement.

Zhao et al. [188] compared four models of strategic planning as illustrated in Figure 4.1, and found model 4 to be the best one, because:

- The strategic plan becomes the driving force for departmental change. Every organization needs to change to adapt to a changing environment. It is reasonable to argue that planned and proactive change is better than unplanned and reactive change. In this sense, strategic planning under this model represents planned change in an organization. The implementation of this model requires a fundamental change in many areas such as planning, organizational change, and performance evaluation.
- Sworn officers at every rank are held accountable for their assignments. New evaluation methods are developed to hold employees accountable. For example, problem-solving activities can be incorporated into

performance evaluation. Community surveys can also be used to indicate the performance of patrol beats, etc.

- The community is familiar with the agency's strategic plan.
- Organizational change can be formally documented and updated in accordance with the plan. There is a good fit between strategic planning and community policing because they share very similar principles of organizational change.
- Consensus exists among employees with regard to where the department is headed. If the plan is written with the participation of employees in the development of goals, objectives, and specific measures, the plan derives legitimacy from employees.
- The level of change is significant and risks associated with conflict and turmoil and even failure are elevated because substantial change (and especially cultural change) is difficult.

4.2. Intelligence Strategy

Traditionally, intelligence was understood to mean information from criminals about criminal activity by a covert source. Today, intelligence is a systematic approach to collecting information with the purpose of tracking and predicting crime to improve law enforcement [192]. Intelligence analysts investigate who is committing crimes, how, when, where, and why. They then provide recommendations on how to stop or curb the offences. As part of this, analysts produce profiles of crime problems and individual targets, and produce both strategic (overall, long-term) and tactical (specific, short-term) assessments within the confines set by the police force.

The aim of intelligence strategy is to continue to develop intelligence led policing in all parts of a nation and in all regions of the world. An intelligence strategy provides a framework for a structured problem-solving and partnership-enhanced approach, based around a common model. For example, the National Intelligence Model in the UK is a structured approach to improve intelligence-led policing both centrally and locally in policing districts such as the South Yorkshire Police [162].

Intelligence-led policing is carried out in many law enforcement areas. For example, intelligence-led vehicle crime reduction was carried out in the West Surrey police area in the UK. Analysis of vehicle crime included identifying the following [192]:

- locations (hotspots, streets, car parks, postcodes, wards, etc.) of vehicle crime;

- sites where vehicles were dumped;
- times of offences;
- prolific vehicle crime offenders;
- areas where prolific offenders were identified as offending;
- models of vehicles targeted for vehicle crime;
- type of property stolen in theft from vehicle offences.

The analysis resulted in problem profiles, which identified emerging patterns of crime. These patterns included vehicle crime occurring in beauty spot car parks and the theft of badges from cars. Such information was disseminated to local officers to act on.

Intelligence-led policing is defined as a business model and a management philosophy according to Ratcliffe [121]:

Intelligence-led policing is a business model and managerial philosophy where data analysis and crime intelligence are pivotal to an objective, decision-making framework that facilitates crime and problem reduction, disruption and prevention through both strategic management and effective enforcement strategies that target prolific and serious offenders.

An interesting case of intelligence-led policing in the UK was the project called "Operation Gallant" that led to a reduction of 17% in car thefts. Operation Gallant involved all Basic Command Unit (BCU) in the collection and analysis of information [192]:

In the case of Operation Gallant, the intelligence-led vehicle crime reduction approach involved the activity of officers from across a BCU. A crime analyst, dedicated solely to examine vehicle crime patterns and trends, developed a detailed picture of vehicle crime in the area, including analysis of time, location, vehicle type and known offenders. As a result of this strategic analysis, a number of interventions were planned, drawing heavily upon the Operation Igneous tactical menu. The most significant, in terms of resources devoted to the operation, involved a program of prolific offender targeting and crime prevention advice targeted towards the owners of high-risk vehicles.

The substantial decline in car crimes were explained by the increased attention paid to this crime sector [192]:

Given the fact that the first reduction coincides with the commencement of the planning process for Operation Gallant, this may

also reflect an anticipatory effect in which the very act of planning and talking about an operation leads to a decline.

4.3. The Case of National Intelligence Model in the UK

In the UK, the National Intelligence Model was introduced in 2000 to focus on how intelligence is used and where it is sourced. According to John and Maguire [32], NIM provides a cohesive intelligence framework across the full range of levels of criminality and disorder. NIM has inspired intelligence strategy in many countries, such as the Police Intelligence Model in Sweden [110] and the National Strategy for Intelligence and Analysis in Norway [109].

NIM is a model for policing which should ensure that information is fully researched, developed, and analyzed to provide intelligence. Intelligence enables senior managers to provide strategic direction, make tactical resource decisions about operational policing, and manage risk. The model works at three levels: (1) local/basic command unit, (2) force and/or regional, and (3) serious and organized crime that is usually national or international.

The organization of information within NIM starts with the creation of a strategic assessment. The strategic assessment identifies issues that are likely to affect service delivery. All partners within crime and disorder reduction partnerships in England commit resources and coordinate activity to deal with those issues. An accurate and thorough assessment will allow managers to make informed decisions about service delivery, which will assist them in achieving performance targets [162].

The national intelligence model in the UK by which the Norwegian strategy was stimulated, is a business model for law enforcement. It became the policy of the Association of Chief Police Officers (ACPO), and many forces underwent major restructuring and were allocated new resources in order to implement it. NIM takes an intelligence-led approach to policing. The UK government acknowledged its benefits, and all forces in England and Wales were required to implement NIM to national minimum standards from 2004.

NIM consists of nine individual elements as follows [207].

(1) *Crime Pattern Analysis* is a generic term for a number of related analytical disciplines such as crime, or incident series identification, crime trend analysis, hot spot analysis, and general profile analysis.
(2) *Market Profile* is an assessment, continually reviewed and updated, that surveys the criminal market around a particular commodity,

such as drugs or stolen vehicles, or of a service, such as prostitution, in an area.

(3) *Demographic/Social Trend Analysis* is centered on an examination of the nature of demographic changes and their impact on criminality, as well as on the deeper analysis of social factors such as unemployment and homelessness, which might underlie changes or trends in offenders or offending behavior.

(4) *Criminal Business Profile* contains detailed analysis of how criminal operations or techniques work, in the same way the legitimate businesses may be explained.

(5) *Network Analysis* describes not just the ulinkages between people who form criminal networks, but also the significance of the ulinks, the roles played by individuals and the strengths and weaknesses of a criminal organization.

(6) *Risk Analysis* assesses the scale of risks posed by individual offenders or organizations to individual potential victims, the public at large, and also to law enforcement agencies.

(7) *Target Profile Analysis* embraces a range of analytical techniques, which aim to describe the criminal, his or her criminal activity, lifestyle, associations, the risk the person poses, and personal strengths and weaknesses in order to give focus to the investigation targeting each person.

(8) *Operational Intelligence Assessment* maintains the focus of an operation on the previously agreed objectives, particularly in the case of a sizeable intelligence collection plan or other large scale operation.

(9) *Results Analysis* evaluates the effectiveness of law enforcement activities, for example the effectiveness of patrol strategies, crime reduction initiatives or a particular method of investigation.

Element 4 in NIM is of particular interest when focusing on criminal organizations. This element acknowledges the enterprise paradigm of organized crime, where legal and illegal businesses share some common features. A criminal business profile might focus on primary and secondary activities of criminal organizations similar to non-criminal organizations. The profile might examine all aspects of activities, such as how victims are selected, the technical processes involved in the crimes, methods of removing, disposing of or laundering proceeds, and weaknesses in systems or procedures that the criminal business exploits. Similarly, element 5 supports the enterprise paradigm for criminal organizations.

Element 3 in NIM is often concerned with designing geo-demographic classification. Geo-demographics is a field of study, which involves the

classification of persons according to the type of neighborhood in which they live. As a method of segmenting people it has long been of value to direct marketers who, being often unable to identify the age, marital status or occupational status of people in mailing lists, found it a useful means of applying selectivity to their mail shots. By analyzing the behavioral characteristics of consumers in different types of neighborhoods they found they could improve business performance by targeting promotional activities to names and addresses failing within specific types of postcode [177].

There will be variation in the extent of implementation from police district to police district. This variation is explained in the research model by three factors: national agency support, local police readiness, and environmental support. The unit of analysis is the police district, implying that there will be variation in support from the national agency to different police districts.

As this research is conceptual, future research may empirically test the research model by testing the three research hypotheses.

4.4. The Case of National Strategy for Intelligence and Analysis in Norway

In May 2007, the Norwegian Police Directorate concluded a strategy process with the document "National Strategy for Intelligence and Analysis." According to the document, all police districts in Norway had to implement the strategy [109].

The Norwegian National Strategy for Intelligence and Analysis developed by the Norwegian Police Directorate in 2007 [109] was very much stimulated by the development of NIM in the UK. It defines three levels for intelligence and analysis in Norway: local police districts, cooperation between police districts, and national and international intelligence and analysis.

The vision for the national strategy is that "the police shall always make the right decision at the right time," while "the main goal of strategic intelligence and analysis is to provide decision-makers with the best possible basis for" prioritizing commitment areas, preparing operation, collaborating with external partners, planning efficient use of resources, developing strategies for prevention, and assessment and evaluation. At the operational level, strategy goals include initiating and supporting investigation, initiating and supporting operative action, preventing incidents, planning efficient use of resources, collaborating with external partners, and assessment and evaluation.

According to the strategy document, there are several prerequisites to achieve strategic and operational goals:

- *Management responsibilities.* It is important that the management has a comprehensive view of the organization and involves stakeholders and problem owners.
- *Measurement criteria.* Police is traditionally measured in terms of detection rate, processing time and backlog of cases. Parameters should be developed to capture citizen satisfaction with police work, extent of safety, crime level, and threat level.
- *Evaluation.* Both strategy effect and strategy process should be evaluated.
- *Professional values.* The intelligence and analysis work of the police shall be characterized by a high degree of professional ethics.

The main focus of the Norwegian strategy document seems to be organization in terms of responsibility for intelligence at the national, regional, and local level respectively, as illustrated by Figure 4.2. The document does not define or describe intelligence or analysis, which are important terms in this strategy.

Chapter 7 in the document is concerned with competence and training [109]:

The basic characteristics of all analysis work are critical thinking and curiosity. The analyst should be humble and at the same time have integrity. He/she should be creative. At the same time, the work requires a structured approach in order to handle vast volumes of data without losing sight of the purpose of the work. The analyst is to monitor and follow social development in those areas that may be of significance for the development of criminality.

A professional police background and experience are important for operative analysts. They must have ample knowledge of and experience from investigation and intelligence. For strategic analysis a social science background is considered more important. Social science methodology may better enable the analyst to use information-based theories from the academic literature and thus have a broader perspective of sources—understanding and explaining trends and development features. A social science background also provides expertise regarding quantitative methodology that deals with variables and values (descriptive statistics, deduction

National Strategy for Police Intelligence and Analysis

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1.2 The Working Party's work
2. Summary
3. Purpose
4. Vision and goals
4.1 Vision
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6. Organisation
6.6 National, regional and local responsibility
6.6.1 Level 1 – Police district level
6.6.2 Level 2 – Regional level
6.6.3 Level 3 – National level
6.6.4 Level 4 – Paramount level
7. Competence and training
8. Recommendations

FIGURE 4.2. Table of contents in the document National Strategy for Police Intelligence and Analysis [109].

statistics) and qualitative methodology that deals with concepts and categories (techniques for reduction and understanding of textual material).

4.5. Is Strategy Always Strategy?

"Strategy" is a label frequently applied to a wide variety of activities, thoughts, initiatives, and documents in industry and government. There seems to be no limit to the use of this popular term. Yet a number of definitions of strategy might enable some borderlines for the use and misuse of this label. Today, anecdotal evidence suggests that strategy is used as a label every time something is considered to be "important." Often, executives, suppliers and others use the term strategy to achieve attention. So, if an initiative, a project or a plan is important, is it then always strategy?

This section attempts to clarify some criteria and characteristics of strategy in terms of documents carrying this term. The recent national strategy for police intelligence and analysis in Norway is used as a case for discussion [109]. This is a document of 20 pages.

To determine whether or not a document might be characterized a "strategy" is useful in many respects. First, strategy implementation follows strategy planning. If the content is not intended for implementation, then it might be misleading to label it strategy. Next, strategy expects priority. If the content is not important, then again it might be misleading to label it strategy. Furthermore, strategy is perceived as some kind of direction. However, if nobody knows what the organization wants to achieve, then there is hardly any identifiable direction.

Strategic planning takes many different forms in different organizations. However, Boyd and Reuning-Elliotts [168] study of strategic planning provide strong support for the measurement properties of the strategic planning construct. In particular, the study results indicate that strategic planning is a construct that can be reliably measured through seven indicators: *mission statement, trend analysis, competitor analysis, long-term goals, annual goals, short-term action plans, and ongoing evaluation.* This evidence is important, because previous researchers rarely tested for dimensionality of the planning construct, nor did most studies report tests of the reliability of their measures.

Similarly, Grant [8] found that the resulting strategic plan after a planning process typically comprises the following elements:

- *Time*: A statement of the planning period or planning horizon.
- *Goal*: A statement of the goals the organization seeks to achieve over the planning period.
- *Forecast*: A set of assumptions or forecasts about key developments in the external environment to which the organization must respond.
- *Change*: A qualitative statement of how the shape of the organization will be changing in relation to activities, procedures, and priorities.
- *Action*: Specific action steps with regard to decisions and projects, supported by a set of milestones, stating what is to be achieved by specific dates.
- *Finance*: A set of financial projections, including operating budgets to implement the plan.

A *well-formulated* strategy helps to *allocate* an organization's *resources* into a unique and viable posture based on its relative internal competencies and shortcomings. Strategy is at a different *level* than tactical or operational

TABLE 4.1. Evaluation of National Strategy for Police Intelligence [109] in terms of strategy construct requirements.

Strategy Construct Requirements	POD Strategy Evaluation
Analysis of the present intelligence situation?	No
Analysis of the future intelligence situation?	No
Description of actions based on strategy?	Yes: Measurement criteria
Financing actions to enable implementation?	No
Time frame for strategy implementation?	No
Goals to be achieved based on the strategy?	Yes: Decision support in policing
Intelligence and analysis defined and described?	No

plans. Strategy is about decision-making, and strategy has certain persons as decision-makers. Strategy also describes the most significant *policies* guiding or limiting actions, as well as the major *action sequences* to be accomplish are the defined goals within the limits set. A strategy includes an *analysis* of the past, present and future.

Based on the current document entitled National Strategy for Police Intelligence and Analysis and requirements of the strategy construct, it is now possible to conduct a content analysis of the strategy document.

By simple count there are two times Yes and five times No in Table 4.1. This result indicates that the Norwegian document is not necessarily a strategy, although it claims to be so.

From an implementation point of view, police districts in Norway find it difficult to implement the "strategy." While the National Police Directorate demand that they do it, many police districts seem reluctant to do it in 2008—one year after the strategy was launched. So far, the explanation has been local resistance to change. This research suggests another explanation: the strategy document is not good enough to guide implementation.

This was a little exploratory research, exploring the possibility of determining whether a document claiming to be a "strategy" really is just that. More research is needed to clarify the issues and establish a consistent set of characteristics and strategy construct requirements. While some characteristics may be classified as requirements, other characteristics may be classified as recommended.

More research is also needed to evaluate strategy documents in terms of thorough content analysis [126]. As an alternative to the application of predefined categories for classification, grounded theory might be applied. Grounded theory involves the systematic collection and analysis of data for the purpose, ultimately, of generating theory [76]. Within grounded theory, we find axial coding which is the process of relating codes to each other via a combination of inductive and deductive thinking. For example, Phillips and Noble [108] clustered statements that appeared to pertain to similar ideas into categories. Grounded theory might be applied in future research on the collected characteristics of strategy documents.

Not all documents labeled "strategy" are strategy in the sense of the common strategy construct. Too many documents seem to misuse this label to attract attention. This section is reported from early research into the evaluation of documents claiming to be strategies. Much future research is needed in terms of the strategy construct, characteristics and requirements, as well as relevant content analysis of strategy documents.

5 Intelligence Information Sources

While data are numbers and letters without meaning, information is data in a context that makes sense. Information combined with interpretation and reflection is knowledge, while knowledge accumulated over time as learning is wisdom. In this hierarchical structure we find intelligence as more than information and less than knowledge. Intelligence is analyzed information, as illustrated in Figure 5.1.

Data is considered the raw material out of which information develops. As noted, information is data endowed with relevance and purpose. The same can be said about intelligence in that it is a form of insight to which some relevance has been attached through an attempt to offer an organized analysis of the information received by a crime analyst and/or intelligence officer. Hence, this is why intelligence is placed between information and knowledge on the above continuum, as ideally intelligence represents as argued a form of validated information.

A core process of policing and law enforcement is investigation. It is a policing truism that information is the lifeblood of an investigation. An investigation goes nowhere if information is not forthcoming about an incident. Information is the raw data that supplies the oxygen, which breathes life into an investigation. Information is collected by ordinary rank and file police officers either working on the street, patrolling and talking to the public, or sitting at a computer doing searches, background checks, or more sophisticated crime mapping and intelligence analysis reports.

Information and intelligence then consists to a similar extent of facts and other data which is organized to characterize or profile a particular situation, incident, or crime and the individual or group of individuals presumed to be involved. This organizing of the data to meaningful

information of necessity involves some level of interpretation of the facts as presented. However, the role of interpretation here in information is relatively minor in comparison to its role in terms of knowledge construction. In this regard, the role of interpretation in intelligence is greater and more explicit than in information, but not as full blown as in the making of knowledge.

Knowledge helps develop relevant meaning to information in police intelligence [28]:

> The distinction between information and intelligence is well established, but can be difficult to grasp. Information consists of bits of data that, when combined and viewed together with relevant background knowledge, may be used to produce intelligence, which informs the actions and decisions of policing organizations.

Knowledge as implied operates at a higher level of abstraction and consists of judgments and assessments based in personal beliefs, truths, and expectations about the information received and how it should be analyzed, evaluated, and synthesized—in short interpreted—so that it can be used and implemented into some form of action.

5.1. Categories of Information Sources

In intelligence work for policing criminal business enterprises, a variety of information sources are available. Sheptycki [140] list the following information sources: victim reports, witness reports, police reports, crime scene examinations, historical data held by police agencies (such as criminal records), prisoner debriefings, technical or human surveillance products, suspicious financial transactions reporting, and reports emanating from undercover police operations. Intelligence analysis may also refer to governmental records of other governmental departments and agencies, and other more open sources of information may be used in elaborate intelligence assessment.

However, Sheptycki [140] found that most crime analysis is organized around existing police sector data. Intelligence analysis is typically framed by already existing institutional ways of thinking. He argues that organized crime notification, classification, and measurement schemes tend to reify pre-existing notions of traditional police practice.

In this perspective, it is important for strategic criminal analysts to be aware of the variety of information sources available. We choose to classify information sources into the following categories in this book.

(1) *Interview.* By means of *interrogation* of witnesses, suspects, reference persons and experts, information is collected on crimes, criminals, times and places, organizations, criminal projects, activities, roles, etc.

(2) *Network.* By means of *informants* in the criminal underworld as well as in legal businesses, information is collected on actors, plans, competitors, markets, customers, etc. Informants often have connections with persons that a police officer would not be able to approach formally.

(3) *Location.* By analyzing potential and actual *crime scenes* and potential criminal scenes, information is collected on criminal procedures, preferences, crime evolution, etc. Hot spots and traces are found. Secret ransacking of suspicious places is part of this information source. Pictures in terms of crime scene photographs are important information elements.

(4) *Documents.* Studying documents from *confiscations* may provide information on ownership, transactions, accounts, etc.

(5) *Observation.* By means of *anonymous police presence,* both persons and activities can be observed. Both in the physical and the virtual world, observation is important in police intelligence. An example is digital forensics, where successful cyber crime intelligence requires computer skills and modern systems in policing. Digital forensics is the art and science of applying computer science to aid the legal process. It is more than the technological, systematic inspection of electronic systems and their contents for evidence or supportive evidence of a criminal act. Digital forensics requires specialized expertise and tools when applied to intelligence in important areas such as online victimization of children [228].

(6) *Action.* For example, *provocation* is an action by the police to cause reactions that represent intelligence information. In the case of online victimization of children, online grooming offenders in a pedophile ring are identified and their reaction to provocations leads intelligence officers into new nodes (persons, computers) and new actual and potential victims. While the individual pedophile is mainly concerned with combining indecent image impression and personal fantasy to achieve personal satisfaction, online organizers of sexual abuse of children are doing it for profit. By claiming on the Internet to be a boy or girl of 9 years, police provoke contact with criminal business enterprises making money on pedophile customers [228]. Undercover operations by police officers do as well belong to the action category of information sources.

(7) *Surveillance*. Surveillance of places by means of *video cameras* as well as microphones for viewing and listening belongs to this information source. Police are listening in on what is discussed in a room without the participants knowing. For example, police in a country identified which room was used by local Hells Angels members in their resort for crime planning and installed listening devices in that room.

(8) *Communication control*. Wire tapping in terms of *interception* belongs to this information source. Police is listening in on what is discussed on a telephone or data line without the participants knowing.

(9) *Physical material*. Investigation of material to identify for example *fingerprints* on doors or bags, or material to identify blood type from blood splatters. Another example is legal visitation, which is an approach to identify illegal material. DNA is emerging as an important information source, where DNA is derived from physical material such as hair or spit from a person. Police search is one approach to physical material collection.

(10) *Internet*. As an *open source,* the Internet is as important for general information and specific happenings to police intelligence as to everyone else.

(11) *Policing systems*. Readily available in most police agencies are *police records*. For example, DNA records may prove helpful when having DNA material from new suspects.

(12) *Citizens*. Information from the *local community* is often supplied as tips to local police using law enforcement tip lines.

(13) *Accusations*. Victimized persons and goods file a *claim* with the police.

(14) *Exchange*. International *police cooperation* includes exchange of intelligence information. International partners for national police include national police in other countries as well as multinational organizations such as Europol and Interpol.

(15) *Media*. By reading newspapers and watching TV, intelligence officers get access to *news*.

(16) *Control authorities*. Cartel agencies, stock exchanges, tax authorities and other control authorities are *suppliers of information* to the police in case of suspicious transactions.

All these information sources have different characteristics. In Figure 5.2, information sources are distinguished in terms of the extent of trustworthiness and the extent of accessibility.

Prisons and other correctional environments are potential places for several information sources and production of intelligence useful to law enforcement. The total prison environment, including the physical plant,

Knowledge continuum in policing

Insights/judgments/assessments/beliefs/understandings
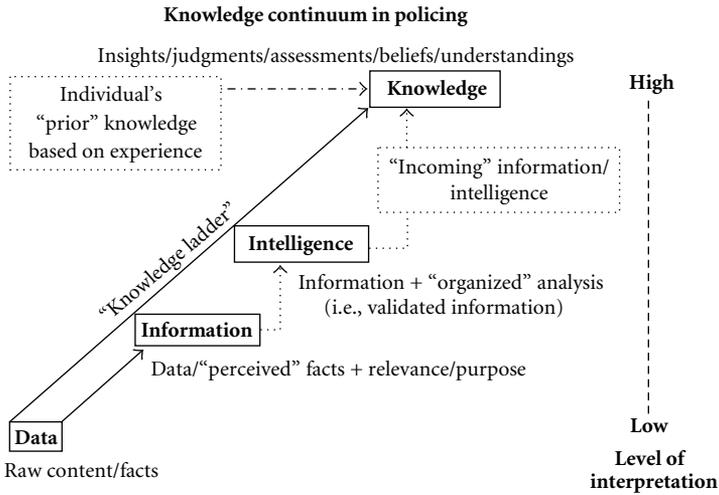

FIGURE 5.1. Hierarchy of police insight expressed as a continuum.
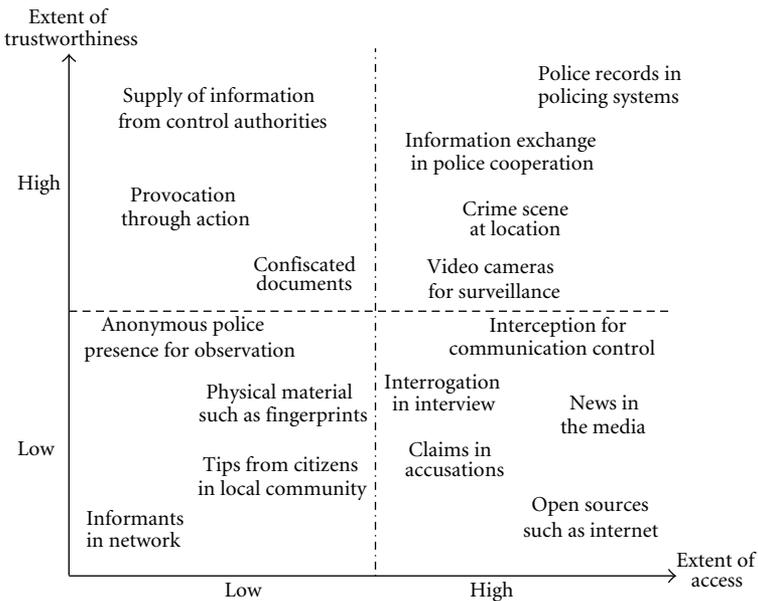
FIGURE 5.2. Trust in and access to information sources.

the schedule regimens of both staff and inmates, and all points of ingress
and egress can be legitimately tapped for intelligence purposes in countries

such as the USA [77]. Since organized criminals are often sophisticated in using the correction environment to their advantage, police and correction personnel need immersion in the intelligence operations and strategies of their respective agencies. Legal visitation and escape attempts are sources of information. Prisoners are reluctant to testify, and their credibility is easily attacked. Communication control is derived from inmate use of phones, visits, mail, and other contacts.

5.2. Information into Knowledge Management Systems

The stages of knowledge management technology were defined (see Figure 3.1) as follows:

  (1) officer-to-technology systems, tools for end users, end-user tools, or people-to-technology systems;
  (2) officer-to-officer systems, information about who-knows-what, who-knows-what systems, or people-to-people systems;
  (3) officer-to-information systems, information from knowledge workers, what-they-know systems, or people-to-docs systems;
  (4) officer-to-application systems, information systems solving knowledge problems, how-they-think systems, or people-to-application systems.

Information sources and information systems can be ulinked as illustrated in Figure 5.3.

5.3. Organized Crime Intelligence Analysis

For Innes et al. [27], crime analysis is concerned with insight and understanding:

> There has been a move away from an ad hoc, intuitive and largely unstructured mode of analytic work, to a more ordered, rationalized approach, based upon specific methodologies, on the basis that this provides a more "objective" perspective on patterns of crime and offending. This has raised the profile and status of intelligence analysis within policing, and has also shown new techniques and technologies introduced, which should, at least in theory, allow police a better understanding of how, when, and why crimes are occurring.

	Officer-to-technology system	Officer-to-officer system	Officer-to-information system	Officer-to-application system
Integration in interview				
Informants in network				
Crime scene at location				
Confiscanted documents				
Anonymous police presence for observation				
Provocation through action				
Video cameras for surveillance				
Interception for communication control				
Physical material such as fingerprints				
Open sources such as internet				
Police records in police systems				
Tips from citizens in local community				
Claims in accusations				
Information exchange in police cooperation				
News in the media				
Supply of information from control authorities				

Figure 5.3. Information sources for information systems in police intelligence.

Crime analysis is described by the Council of Europe [219] as a law enforcement function whereby data relating to crime are collected,

collated, analyzed, and disseminated. Crime analysis is the study of crime patterns and trends in an attempt to solve crimes or prevent their repeat occurrence.

A distinction can be made between operational/tactical analysis and strategic analysis. Operational analysis is directed towards a short-term law enforcement goal with an immediate impact in mind, for example, arrest, seizure, and forfeiture. The goal of strategic crime analysis is to develop a policy, to implement a policy, or to evaluate the policy based on insights into the nature of a type of crime or criminal, the scope and projections of growth in types of criminal activities. But strategic analysis need not be restricted to crime; methods of strategic analysis can be used principally for all kinds of security and safety problems. Strategic analysis can deal with crime as well as with other security issues like traffic problems and public order maintenance. According to the Council of Europe [219], it starts with the question which information is needed, which data is lacking. A structured plan has to be developed and to be discussed. The next step is the detection of a problem, the consideration of a new phenomenon, and the gathering of information.

Examples of strategic crime analysis include the following:

- *Crime pattern analysis* is the examination of the nature and distribution of crime within an area, in order to identify the emerging and current trends and patterns, ulinked crimes or incidents, and hot spots of activity. It includes crime trend identification, crime series identification, general profile analysis, hot spot analysis, examination of the nature and scale of crime within an area and within a time frame.

- *Crime control methods analysis* is the examination of investigative or preventive methods and techniques with the aim of establishing their future usefulness.

- *General profile analysis* is the identification of the typical characteristics of perpetrators of certain crimes.

- *Results analysis* is the evaluation of the effectiveness of law enforcement activities.

- *Demographic/social trends analysis* is the examination of the nature of demographic changes and their impact on criminality, as well as the analysis of social factors (e.g., unemployment), which might underlie changes in trends in offending patterns to describe statistically the constitution of the population of a given area and the associated economic indicators with reference to law enforcement requirements.

- *Criminal business analysis/profile* is the examination in detail how illegal operations/businesses and techniques work.
- *Market profile* is a survey of the criminal market around a given commodity (e.g., illicit drugs, stolen vehicles). It can include crime pattern analysis and network analysis.
- *Strategic analysis* is the category of types of crime analysis designed to aid the formation or the evaluation of crime policy. It aims to provide information which can represent a picture of a phenomenon, and which can identify trends in criminality on which management can base their decisions.

Examples of tactical/operational crime analysis include the following:

- *Specific profile analysis* is the identification of the specific characteristics of perpetrators of certain crimes, construction of a hypothetical picture of the perpetrator of a serious crime or series of offences on the basis of crime scene data, witnesses' statements, and other available information.
- *Offender group analysis* is the examination of the structure of a group of suspects, the significance of each member and their involvement with criminal activities.
- *Investigations/operations analysis* is the evaluation of the effectiveness of activities that are undertaken within the context of an investigation.
- *Case analysis* is the establishment of the course of events immediately before, during, and after a serious offence.
- *Comparative case analysis* is the identification of series of crimes with common offenders by seeking similarities between offences.
- *Operational crime analysis* is the category of types of crime analysis designed to support the investigation of one particular crime or one specific series of crimes with common offender(s). It aims to provide an understanding of the information collected during a specific investigation.
- *Network analysis* is the provision of a detailed picture of the roles played by individuals, the nature and significance of the ulinks between people, and the strengths and weaknesses of the criminal network.

UK police forces report every three months from crime analysis of the organized crime. The regional offices deal with various law enforcement organizations and some non-government organizations. Organized criminal groups are mainly investigated by the regional police forces, sometimes

assisted by national agencies. In complex cases, which most the investigations of organized crime are, analysts are involved. They apply various analysis techniques, including large variety of charting techniques, for example, to visualize associations between entities (ulink charts), flows of money or other commodities (flow charts), or sequences of events in time (event charts).

In intelligence analysis, the raw material for analysis is information (based on information sources) and knowledge (based on experience). We have argued that intelligence is located on a continuum somewhere between information and knowledge. Ratcliffe [121] has presented an alternative view by arguing that intelligence is at a higher level on the continuum than knowledge, and he uses the acronym DIKI for data, information, knowledge, and intelligence to illustrate his point:

> To place the DIKI continuum in context, consider this example. At a local police station, a computer database records and retains the location of residential burglary incidents. These computer records are *data.* When a crime analyst accesses the data and recognizes an emerging pattern of new burglaries in an area not normally plagued with a break-and-enter problem, then this becomes *information.* In essence, raw data have been enhanced with sufficient meaning to recognize a pattern. If the analyst subsequently talks to a detective and shares this information, and the detective remembers that a new pawnshop has just opened in the area and that known burglars have been seen entering the pawnshop, this collective wisdom becomes *knowledge.* Various information strands have coalesced to enable the detective and the analyst to build a picture of the criminal environment in their minds, a picture that undoubtedly has gaps, but that also has enough substance to support hypotheses and contain implications. This is the structure of knowledge. Finally, when the crime analyst and the detective take their knowledge to a senior officer who agrees to investigate the pawnshop and mount a surveillance operation to target burglars and gather further informaton, then this knowledge becomes *intelligence.* In other words, somebody uses it explicitly to try to reduce crime.

While this definition is certainly fascinating, it is neither mainstream nor feasible when our basic assumption is that intelligence is input to analysis. Furthermore, the definition of information does also seem a little bit strange, as information here seems to imply input from knowledge. Therefore, we continue using our stage approach in terms of data, information, intelligence, knowledge, and wisdom.
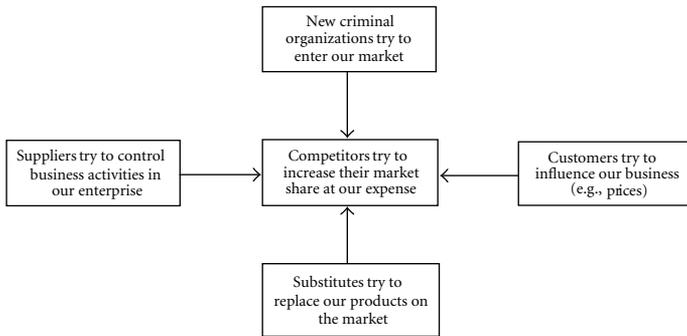
FIGURE 5.4. Competitive forces on criminal markets.

5.4. Market Share Intelligence Analysis

For a long time, it was assumed that organized criminals had monopoly in their markets [210], because competition and competitors seemed invisible in their criminal activities. Therefore, theories of monopoly were frequently used in the study of organized crime.

However, more recent studies have concluded that competitive markets exist for most criminal business enterprises. A market is characterized by five different kinds of actors: the criminal business enterprise, competing criminal enterprises, customers, suppliers, and substitute product business enterprises, as illustrated in Figure 5.4. Market share of the criminal business enterprise will only increase if the market share of competing criminal enterprises decreases. If the market is growing and sales are stable for a criminal business enterprise, then it means that the market share for the enterprise is decreasing.

Competitive forces can be influenced by law enforcement actions. For example, after police shot and killed Ramon Arellano Felix who headed the Tijuana cartel in Mexicoin 2002, the position of Ismael Zambada-Garcia's Sinaloa cartel was strengthened by increasing market share in the drug trade [145].

One of the studies showing that there are competing market forces, was conducted by Paoli [102], who studied drug trade in Italy, Germany, and Russia.

> The drug markets of the three environments we have investigated are open markets: the relationships between drug dealing enterprises usually more nearly resemble competition than collusion. There are virtually no barriers to entry. Although some suppliers

(such as Italian Mafia groups) may occasionally enjoy considerable monopolistic power over local (usually small) markets, in most European and Russian cities drug enterprises seem to be price-takers rather than price-givers. This means that none of them is able to influence the commodity's price appreciably by varying the quantity of the output sold.

When there are many customers and suppliers on a market, no single supplier or customer can determine the price. The price is determined on the market by what is called "the invisible hand of the market." Paoli [102] states that because of "the invisible hand of the market," it is so difficult for law enforcement to find evidence of what is actually going on.

Law enforcement agencies often resort to the specter of large-scale criminal organizations to back their requests for extra funding. As a matter of fact, it is the "invisible hand of the market" that reduces the effects of their repressive actions near to zero. At the retail level, the "industrial reserve army" willing to sell drugs seems to have no end. As a Milanese drug user noted, "for every five Moroccans who are arrested, there are at least fifty ready to do the same job even at less."

While there are few criminal organizations that are completely dominating a market and having a monopoly situation, there are also few criminals who enter a market on their own. Most criminals will join forces with others in a network or hierarchy to gain strength in a competitive market. By joining forces with other criminals, there will be an added value that is shared among participants [103].

Another study showing that there are competing market forces, was conducted by Kenney [45], who studied Colombia's drug trade.

Contrary to received wisdom, Colombia's drug trade has never been dominated by a price-fixing association. Even during the respective heydays of the Medellin and Carli "cartels," cocaine production and exportation in Colombia was highly competitive as independent trafficking groups in more than a dozen cities smuggled substantial amounts of cocaine to American and European drug markets. While some of these enterprises transacted with Pablo Escobar, the Orchoa brothers and other prominent traffickers, their business relations more closely resembled informal producer-export syndicates than public or private cartels that
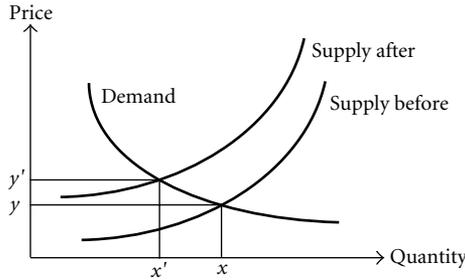
FIGURE 5.5. Market price determined by changing supply curve.

controlled prices and monopolized markets. Although different groups occasionally pooled their resources to complete large-scale drug shipments, while reducing their exposure to government authorities, they steadfastly maintained their own sources of supply, financing and clientele.

The invisible hand of the market causes a price to be fixed on a market based on supply and demand. Suppliers will be willing to sell more products if the price is higher. Customers will be willing to buy more products if the price is lower. Hence, an increasing product price leads to rising supply and falling demand, as illustrated in Figure 5.5.

The term "elasticity" in economics refers to the elasticity of demand and supply when price changes occur. For example, if supply changes drastically by a minor price change, then we say that price elasticity in demand is high. Price elasticity of demand is an elasticity that measures the nature and degree of the relationship between changes in quantity demanded of a good and changes in its price. A price elasticity of 1.0 means that the demand will drop with the same percentage as that of the price increases. If, in response to a 10 percent decline in the price of a product, the quantity demanded increases by 20 percent, then the price elasticity of demand would be 2.0 [231].

The invisible hand of the market determines the market price at y with a quantity of x. This is where the demand curve meets the supply curve in Figure 5.6.

Both demand and supply curves will change over time, causing change in price and quantity. For example, when law enforcement is successful in getting a criminal group into prison, some of the supply disappears from the market. This will move the supply curve to the bottom left in Figure 5.6,
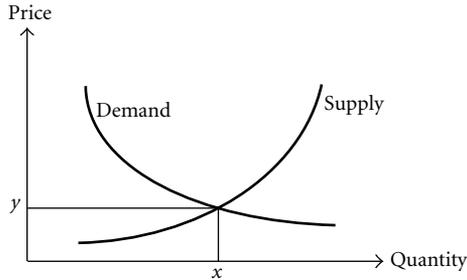
FIGURE 5.6. Market price determined by supply and demand curves.

causing price increase and quantity decrease, as illustrated in Figure 5.5. The price increases from y to y', while the quantity decreases from x to x'.

With a higher market price than before, new criminal groups may be interested in entering this market. If they do so, the market price will drop in direction from y' towards y.

Both in legal and illegal markets, the practice of market economics varies. For example, when trying to introduce the American way of business to the legal economy in Russia, it failed [203]:

> Much of the failure probably resulted because American approaches to economic development—highly successful in other contexts—could not work during Russia's transition from a command economy to its current state. Such things as promoting entrepreneurship, developing public-private partnerships, creating a market economy, accessing start-up capital, attracting foreign investment, overcoming bureaucratic corruption and high taxation, working within the rule of law, and negating organized crime either should not have been done, or could not have been done, leaving many of our programs ineffective.

Similarly, Tanev [163] found that the Western style market economy did not work in Bulgaria. The central government was not willing to loose power in favor of local democracy and market forces.

Demand on criminal markets is determined by a number of factors. Consumers may be dependent on the goods supplied on the market, which is the case for many drugs. Consumers may be willing to explore, which is the case for many sex buyers. Europol [247] made the following finding concerning criminal markets in Europe.

With regard to the facilitating factors in the discussion of criminal markets, a general evolution towards increasingly complex setups for criminal endeavors can be witnessed. Increasingly, horizontal facilitating factors such as document forgery and identity theft, technology, the transport sector, the financial sector and the presence or absence of borders are employed for criminal gain. The latter mainly refers to opportunities provided by decreased border controls whilst administrative and legal borders remain.

Criminal markets expand across borders of nations, because the demand is present in several countries, while nations may have different law enforcement practices. When Europol [247] divides Europe into regions for organized crime: Norway is described as a country with heavily taxed goods and services that stimulate organized crime:

- North East Europe with regard to highly taxed products aimed at the Nordic countries and beyond;
- South West Europe in particular with regard to illegal immigration, cocaine and cannabis trafficking for further distribution in the EU;
- South East Europe specifically with regard to heroin trafficking, illegal immigration and trafficking in human beings, aimed at the whole of the EU.

The price elasticity in both demand and supply will vary from market to market. For example in a heavily dependent drug market, where consumers are completely dependent on their daily dose, elasticity may be very low, as indicated in Figure 5.7. Whatever the price, a low-varying quantity is in demand to satisfy needs.

Market share is the percentage or proportion of the total available market or market segment that is being serviced by an organization. It can be expressed as the organization's sales revenue (from that market) divided by the total sales revenue available in that market. It can also be expressed as an organization's unit sales volume (in a market) divided by the total volume of units sold in that market.

An interesting example of market size and market share is the sex market in Norway, since Norway was criminalizing sex customers in 2008. This is similar to Sweden, where prostitute clients were criminalized some years earlier. While selling sex remains legal, both organizers and customers are illegal actors. The criminal organization trafficking women to the sex market in Norway is illegal. How does the market change? Firstly, the demand curve will change. Next, market shares will change. While the
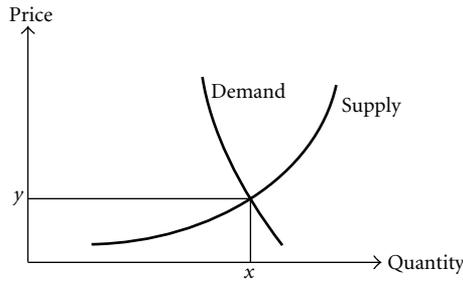
FIGURE 5.7. Market price when demand elasticity is low.

prostitution market has been shared among criminal organizations offering Nigerian, East-European, and Asian women, it might be expected that some pull out of the market, enabling the others to increase their market share. While the total market size is expected to decline, some may increase their market share, thereby sustaining their sales volume.

Increasing market share is one of the most important objectives used in legal business. Market share has the potential to increase profits given positive or no change in market size. Increasing market share enables a criminal business enterprise to change the power structure in the competitive forces game. If the CBE significantly increases its market share, then it might be able to reduce the (negative) influence from substitutes, rivals, customers, clients and new entrants.

Increasing market share is part of marketing management, which is a business discipline focused on the practical application of marketing techniques and the management of an organization's marketing resources and activities. Marketing managers are often responsible for influencing the level, timing, and composition of customer demand in a manner that will achieve the organization's objectives. Typical marketing techniques used by criminal business enterprises include threats, violence, and corruption.

In order to increase market share, businesses develop a marketing strategy based on an objective understanding of their own business and the market in which they operate. Traditionally, marketing analysis was structured into three areas: customer analysis, company analysis, and competitor analysis. More recently, collaborator analysis and industry context analysis have been added.

The focus of customer analysis is to develop a scheme for market segmentation, breaking down the market into various constituent groups of

customers, which are called customer segments or market segments. Marketing managers work to develop detailed profiles of each segment, focusing on any number of variables that may differ among segments: demographic, psychographic, geographic, behavioral, needs-benefit, and other factors may all be examined.

In order to increase market share, competitor analysis is the most important. In competitor analysis, marketers build detailed profiles of each competitor in the market, focusing especially on their relative competitive strengths and weaknesses, opportunities and threats. Marketing managers will examine each competitor's cost structure, sources of profits, resources and competencies, competitive positioning and product differentiation, degree of vertical integration, historical responses to industry developments, alliances and relationships.

While our main focus here is on organized crime in criminal markets, it is also interesting to look at legal markets where organized crime occurs. The *theory of occupational crime* suggests that illegal business activities are forced on market actors because of market pressures. Leonard and Weber [64] argued that insufficient attention has been focused by sociologists and others on the extent to which market structure—that is, the economic power available to certain corporations in concentrated industries—may generate criminal conduct.

Leonard and Weber [64] present an example of occupational crime caused by manufacturer-dealer relationships. While there were only four domestic manufacturers of cars, their products were distributed through 30 000 dealers with facilities scattered throughout USA. Technically, the dealer is an independent businessman. Rarely, however, does he have the capital to acquire more than a fraction of the value of property involved in the dealership. The rest is supplied by the manufacturer and although the dealer may increase his ownership, rising costs of real estate, equipment, and facilities, plus expansion of the dealership, may keep him dependent on the manufacturer for a long time. Further, he operates under restrictive agreement, terms of which are set by the manufacturer.

Dealers were pressured to accept the manufacturer's low margin on car sales. To compensate for low margins, many dealers introduced illegal practices to survive in the business. Typical practices were the following [64].

- Forcing accessories. For example, new cars arrive with accessories, which the buyer did not order but must pay for in order to get delivery.
- Used car markups. Since dealers made little per unit on new car sales, they endeavored to compensate for this by large markups on used cars.

- Service gouging. Dealers also made up for their low returns in the sale of new cars by overcharging for service. This can be managed in may ways: by putting down more labor time than that actually consumed in repairs, by charging for repairs not actually made, by finding things wrong with the car that did not actually need repair, and by replacing parts unnecessarily.
- High finance. Dealers would often finance cars themselves, borrowing money from a bank or credit agency and lending at a higher rate of interest.
- Parts pushing. This involves overcharging for parts, or use of a rebuilt part while charging for a new one.

According to the theory of occupational crime, such practices were introduced by dealers because of the market structure under which they were operating. The only way to survive as a car dealer was to be criminal. It is argued that what appears to the public as unethical or criminal behavior on the part of dealers and mechanics represents "conditioned" crime, or crime stimulated by conditions over which the dealer or mechanic has but little control. Dealers and mechanics operate within systems controlled by outsiders, specifically by a few large automobile manufacturers.

Dijck [231] studied the illicit cigarette market in the Netherlands. He found the market to be relatively open in the sense of a low threshold to enter this market. Newcomers can easily set up a cigarette trafficking scheme. The Netherlands, being a nation of transit and transport, provide a setting for untaxed cigarettes. The market share of untaxed tobacco was estimated to be 3 percent in 2003 and 5 percent in 2005 while the total consumption of tobacco in the Netherlands was declining.

Traffickers of smuggled cigarettes may experience difficulties in ulinking supply and demand at a given time [231].

In one case, for example, offenders discussed over the phone the question whether they would accept a substitute shipment of counterfeit Marlboro cigarettes instead of the original brand cigarettes they bought at previous occasions. The supplier of the original brand cigarettes could not continue his delivery because the police had raided one of the main warehouses and confiscated all cigarettes. Though there is a market for counterfeit cigarettes in the Netherlands as well, these offenders were afraid that their customers particularly favored brand cigarettes, more precisely Marlboro and that they would not be able to get rid of other brands than Marlboro cigarettes.

Dijck [231] found that cigarette traffickers rely on limited networks, consisting of one or two suppliers and a dozen of customers. The cigarette black market provides ample opportunity to make a good profit. The profit opportunities exceed the low risk involved.

Markina [80] conducted a similar study of the cigarette black market in Estonia. The market share of untaxed tobacco in Estoniais estimated to be much higher than in the Netherlands. This is not because legal tobacco prices are higher in Estonia. It is because neighboring countries such as Russiahave much cheaper tobacco and because tobacco prices have risen much faster in Estoniaas compared to the Netherlands.

To join the European Union, Estoniahad to harmonize taxes on cigarettes and other tobacco goods quite quickly. For an ordinary smoker, the harmonization of taxes meant nothing else than a shocking increase in cigarette prices within a relatively short period of time. As a consequence, many smokers looked for alternative supplies of tobacco, and they found it on the black market. A survey in Estonia found that 60 percent of the respondents were ready to purchase illegal cigarettes as a reaction to the price increase.

While a package of legal cigarettes had the price of 2.05 euro in 2007, an illegal package did only cost 0.57 euro. The places where illegal cigarettes are sold are quite well known to the public in Estonia. Customers buy illegal cigarettes either directly from retailers on the street (53%) or at the traders' home (35%). Most of the illegal cigarettes come from bootlegging [80].

> This particular type of smuggling, called bootlegging, involves the purchase of cigarettes in a country where cigarettes are low-priced and transporting them either for personal consumption or resale to the high-priced country in quantities exceeding limits set by custom regulation.

Bootlegging involves transporting cigarettes over relatively short distances, usually between neighboring countries. Shipments of inexpensive Russian brands like "Prima," "Prima Nevo," "North Star" or "Arktika" end up in Estonia.

5.5. Knowledge Workers in Investigations

Policing is generally viewed as a highly stressful and demanding profession. Considerable research has examined stress in policing. According to Richardsen et al. [123], most of this work has focused on the effects of the distress of police officers, the impact of police work on officers' spouses and

families, police suicide, police drinking, police mortality, police fatigue, posttraumatic stress disorder, and the effects of shift work schedules on police performance and health. Although it is not clear whether police work is inherently more demanding than other professions, police officers experience work events that are associated with psychological distress.

Richardsen et al. [123] studied the mediating role of both negative (cynicism) and positive (work engagement) work attitudes in the relationship between work events and work and health outcomes. The cynicism theory proposes that police officers come into the occupation with idealistic notions, but quickly come to realize the hard realities of the world and of police work. Over time, they then become increasingly intolerant of faults and mistakes in others and may lose a sense of purpose. Cynicism may be a way to cope with what is perceived to be an unfriendly, unstable, and insecure world, providing a convenient explanation for constant disillusionment and a way of acting out anger and resentment in the work place.

Richardsen et al. [123] found that cynicism and engagement were highly correlated with both work and health outcomes in the expected direction; that is, cynicism was associated with increased health complaints and reduced commitment and efficacy, and engagement was associated with reduced health complaints and increased commitment and efficacy.

To understand knowledge, the notion of practice and the individual as a social participant in applying knowledge is important. Knowing and learning are integrated, continuous processes for detectives in police investigations. Knowledge always undergoes construction and transformation in use. It is not simply a matter for taking in knowledge. It is an act of construction and creation where knowledge is neither universal nor abstract but depends on context [212].

The status of women in organized crime was presented earlier in this book. As we sometimes find knowledge competition between police organizations and criminal organizations, it is relevant to touch on the role of women in policing. While we find significant variance on a global basis, more and more countries have female officers working with male officers on a regular basis. It is not rare anymore to find a woman police officer heading a policing unit. In fact, heading a police organization is not surprised anymore. For example, in Norway, the managing director of the whole police force is a woman.

While significant barriers still confront women in policing in many parts of the world, a number of legal and cultural obstacles to women in policing have recently been removed. Some gender differences enable female and male officers to complement each other. For example, studies

show that female police officers rely on a policing style that uses less physical force and are less confrontational than male officers.

5.6. How Detectives Work

According to Tong [169], the secretive nature of the detective world has attracted little attention from researchers. However, competing perspectives about detective work can be discerned from available literature. Detective work has been characterized as an art, a craft, a science, and a combination of all the three. The old regime of the seasoned detective highlighted the notion of detective work as a craft. An alternative perspective highlights the scientific nature of detective work, which focuses on the skills needed for crime scene management, the use of physical evidence, investigative interviewing, informant handling, offender profiling, management of the investigative process, and knowledge management.

It is important for detectives to be effective in their work, as new public management is focusing closely on the effective use of resources. However, measuring effectiveness is not an easy task. Measurement, in an investigative context, has focused upon the outcome of cases, often at the expense of evaluating the process of the investigation and quality of its outputs. Tong [169] argues that not only have the police been subject to inadequate measurement criteria such as clear-up rates, there has also been a lack of recognition of good quality police work. The task of recognizing good detective work involves more than providing an appropriate method of measurement; it also implies an awareness of the impact of practice as well as an awareness of the knowledge accumulation, sharing, and reuse.

It follows that the most useful approach to measure detective effectiveness will not necessarily be the measurement of specific outcomes, although such measures will be useful for resource management. Tong [169] argues that effectiveness in the context of detective work is best measured by focusing on the key processes and decisions in which detectives engage to encourage a professional working culture based on how detectives come to decisions. In the context of the value shop for knowledge work, decisions are made in all five primary activities: understanding the problem, identifying problem solutions, prioritizing actions, implementing investigation, and evaluating and controlling detective work.

Tong [169] constructed the following profile of an effective detective after analyzing the academic literature relating to detective skills and abilities:

(1) *personal qualities*, such as intelligence, common sense, initiative, inquisitiveness, independence of thought, commitment, persistence, ability to talk to people, flexibility, ability to learn, reflexivity, lateral thinking, creative thinking, patience, empathy, tolerance and interpreting uncertain and conflicting information, ability to work away from family and home, interpreting feelings, ideas and facts, honesty and integrity.

(2) *legal knowledge*: the knowledge of the law referring to police powers, procedure, criminal justice process, a good grounding in criminal law, awareness of changes to legislation, courtroom protocol, rules of disclosure, use of evidence, format of case file and awareness of defense arguments.

(3) *practical knowledge:* the technology available to detectives and used by criminals, understanding the context in which crime is committed and awareness of investigative roles of different functions of the police organization and specialist advisors, recognition that crime changes with time and place and may require police responses that are tailored to specific context, forensic awareness and practical expertise (e.g., crime scene preservation and packaging of evidence);

(4) *generic knowledge*: the recognition that knowledge changes, awareness of developments in practice will allow the detective to remain up to date;

(5) *theoretical knowledge:* the understanding of theoretical approaches to investigative reasoning and theories of crime;

(6) *management skills* such as the management and control of case information, implementing investigative action, formulating investigative strategies, verifying expert advice, prioritizing lines of enquiry, formulating media strategies, awareness of resource availability and knowledge of roles of personnel available to the investigation, managing knowledge and learning through the use of research skills to enable the detective to remain up to date;

(7) *investigative skills* such as interview technique, presenting evidence, cultivating informants, extracting core information (from files, reports, victims, and witnesses), file construction, appraising and evaluating information, ability to absorb and manage large volumes of information, statement taking, problem-solving, formulate lines of enquiry, create slow time, assimilate information from crime scene, continually review lines of enquiry, question, and challenge legal parties.

(8) *interpersonal skills* such as the ability to communicate and establish a rapport with a range of people, remaining open minded, awareness of consequences of actions and avoiding speculation.

Stelfox and Pease [156] argue that there has been surprisingly little empirical research into the way in which individual officers approach the task of investigating a crime. In their own research they found that investigators are practical people. Assuming that the cognitive abilities of the average investigator are no more nor less than the population as a whole, it can be anticipated that he or she will remain liable to make the same cognitive errors as the rest of us. Assuming also that the decision-making environment the detective works in is unlikely to change much, it can be anticipated that errors will recur.

Intelligence has emerged as an important component of contemporary policing strategies. However, Innes et al. [27] argue that crime intelligence analysis is used in line with traditional modes of policing, is a way of claiming "scientific objectivity" for police actions; and is largely shaped by police perspectives on data. They argue that the sense of enhanced objectivity often attributed to the products of "intelligence work" is frequently overstated. Therefore, the products of crime analysis might be better understood as an artifact of the data and methods used in their construction, rather than providing an accurate representation of any crime problems.

Added to which, Innes et al. [27] found that there has been an increasing frustration within certain sections of the police organization with the perceived failure of community-policing programs to facilitate the routine supply of high-quality information to the police from members of the community. Any such concerns with low policing have been reinforced and amplified by recent developments at the "high policing" level, where there is a well-documented shift towards trying to effect enhanced national security from threats posed by terrorist groups, drug cartels, and organized-crime networks.

The presence of criminal markets and networks implies a degree of organization to the conduct of a crime. In turn, this serves to recursively justify the investment in technologies of analysis. It signals to the police themselves that simply arresting isolated individuals will have only a temporary effect on crime levels, before the adaptive qualities and replacement mechanisms of the surrounding networks and markets cause them to reform. Therefore, they need to conduct analysis so as to improve their awareness of the shape and make-up of the supporting networks and markets in which motivated criminals are located, so that any interventions taken against them are made to have more impact [27].

One of the bottlenecks in international police cooperation is the targeting of the proceeds of crime. International agencies such as Interpol and Europol are sometimes involved in the interaction between the authorities and enforcement organizations of the countries concerned. Borgers and Moors [157] studied bottlenecks in international cooperation for the Netherlands in targeting the proceeds of crime. While no bottlenecks were found in cooperation with countries such as Belgium and the UK, bottlenecks were found in relation with countries such as Spainand Turkey. In relation to Turkey, the Netherlands acts mainly as the requesting state and not the requested state [157].

> Regarding the cooperative relations with Turkey, Turkish respondents state that the framing of Dutch mutual assistance requests is inadequate. On the part of the Netherlands, there are different opinions on the depth of the investigation conducted at the request of the Netherlands. As far as the way in which people address one another is concerned, it is striking that the Turkish respondents sometimes consider the Dutch manner of operation as haughty and impatient. According to Dutch respondents, communication difficulties also occur if Dutch police officials directly contact the Turkish judges involved.

To fight organized crime, law enforcement in the UK was reorganized. UK Serious Organized Crime Agency (SOCA) commenced operations in 2006 with an annual budget of £400 million. SOCA amalgamates the National Crime Squad, the National Criminal Intelligence Service (NCIS), and investigators from Customs and the Home Office Immigration Service [136].

5.7. Detective Thinking Styles

In criminal investigations, detectives apply different thinking styles, such as method style, challenge style, skill style, and risk style. In a survey in Norway, detectives were asked to list the five most important characteristics of effective investigators. This was done in a free format, requiring content analysis to categorize responses. Responses were categorized according to thinking styles. While creativity was the most frequently mentioned characteristic, content analysis shows that the skill style of detectives is the most effective thinking style. To be effective, detectives need to practice good empathic communication, open-minded curiosity, logical reasoning, creative thinking, and dogged determination.
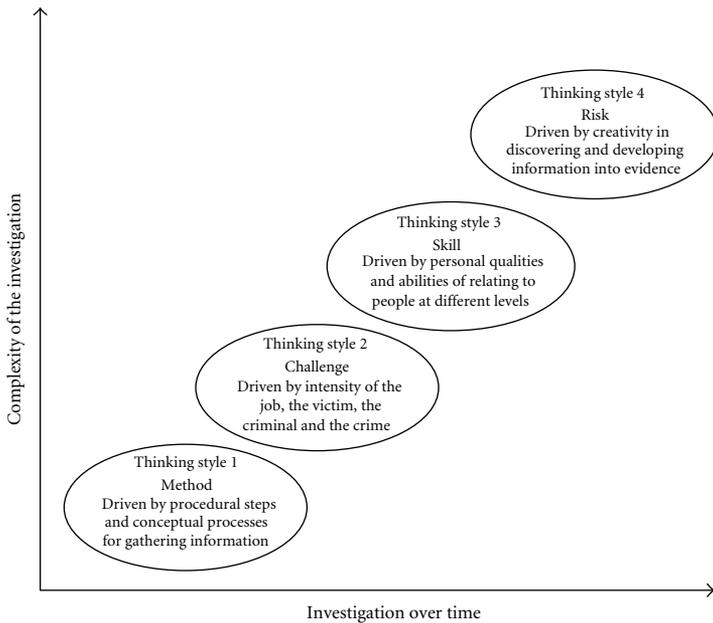
FIGURE 5.8. Ways of thinking about the investigation process.

Creativity is often mentioned as a characteristic of effective detectives. Detectives can be creative in their job by generating new ways to perform their work, by coming up with novel procedures and innovative ideas, and by reconfiguring known approaches into new alternatives [105]. Yet, detectives are often told to work by the book, forgetting the importance of creative thinking and the importance of creative persons [229].

We distinguish between four thinking styles in police investigations [229]. The method style is driven by procedural steps and conceptual processes for gathering information. The challenge style is driven by intensity of the job, the victim, the criminal and the crime. The skill style is driven by personal qualities and abilities of relating to people at different levels. The risk style is driven by creativity in discovering and developing information into evidence.

These four investigative thinking styles were introduced in this research to classify characteristics of effective detectives into relevant thinking styles. Such classification enables identification of important thinking styles and learning [263].

The study was concerned with how police detectives experience, understand, and think about the process of doing serious and complex criminal investigations. In police investigations, the experience of investigation begins for detectives when they are given a crime to solve. When handed a case detectives apply the basics of the procedural method they were trained in.

There are a variety of procedural steps within the criminal investigation training literature for various types of crimes but in essence all such steps follow a logical sequence that can be subsumed under a set of basic steps, referred to as the "5C's" of the police procedural method of investigation. The 5C's are the procedural steps of—collecting, checking, considering, connecting, and constructing—information into evidence.

Conceptually, this "procedural method" presents a problem for detectives in that since their formal investigative training only equips them with this one way of "thinking" investigation, the question becomes how do they learn to think in any other way or do they when investigating?

Previous empirical research has identified that apart from the above-mentioned "method" style of investigative thinking there are three other qualitatively different ways or styles of thinking that potentially can come into play when detectives investigate a crime. The three other styles or preferred ways of thinking about the investigative process that experienced detectives use with serious and complex crimes are the challenge style, the skill style, and the risk style of investigative thinking. How each of these other three investigative thinking styles works in conjunction with the basic method style is briefly outlined.

As detectives conduct a serious and/or complex investigation, they become driven by the intensity of the challenge, which motivates them to do the best job they can for the victim(s) by catching the criminal(s) and solving the crime through the application of the "basic 5C's" of the investigative method style of thinking they were trained in. This challenge style of thinking is all about what motivates detectives to do the best they can do in a particular investigation (home detectives). At this level detectives think about the job, the victim, the crime, and the criminal. These four elements (job, victim, crime, criminal) are the key sources of intensity [21].

In meeting this investigative challenge detectives require skill to relate and communicate effectively to a variety of people to obtain information so as to establish a workable investigative focus [49]. Such skill also requires detectives to be flexible in how they approach people and the case, while maintaining an appropriate level of emotional involvement towards victims, witnesses, informants, and suspects. With this skill style of

investigative thinking, detectives are concerned with how they relate to people. Detectives must think about how they are going to relate to the victim, witnesses, possible suspects, the local community, and the wider general public in order to get the information they need to make the case.

When exercising their investigative skill detectives seek to maximize the possibilities of a good result by taking legally sanctioned and logically justifiable risks across wide latitude of influence. Such justifiable risk-taking requires detectives to be proactive in applying creativity to how they seek to discover new information and, if necessary, how they develop such information into evidence. This risk style revolves around how detectives think through being proactively creative enough to discover new information and if necessary develop it into evidence that will stand up to testing in a court of law.

Although experienced detectives and investigators intuitively use these four levels of thinking in an investigation, it is rare that any one detective will give equal weight to all four styles of investigative thinking in a particular case, because detectives, like everyone else, have a preference for maybe one or two particular styles or ways of thinking.

This phenomenon is about the cognitive psychology of police investigators. At its core, investigation is a mind game. When it comes to solving a crime, a detective's ability to think as an investigator is everything. Four distinctively different ways of thinking are investigation as method, investigation as a challenge, investigation as a skill, and investigation as a risk. All four ways of describing a criminal investigation can be seen as more or less partial understandings of the whole phenomenon of investigation.

The four distinctively different ways of thinking (styles) about the investigation process by detectives are illustrated in Figure 5.8. As can be seen in the figure, there is a hierarchical structure to how investigators think. Not all cases will require the use of all four investigation-thinking styles to solve them. However, as time matches on in an investigative without a result, then other styles of investigative thinking will need to come into play to increase the likelihood of a successful outcome. In essence, the more complex the crime the higher the investigative thinking style is required to solve it.

5.8. Characteristics of Effective Detectives

A survey instrument was applied in this research, where respondents filled in a space. In the open electronic space, respondents could write five characteristics in their own wording. To classify these responses, content analysis was needed. According to Riffe and Freitag [126], seven features of

content analysis distinguish poor studies from excellent studies. First, an explicit theoretical framework is needed. In this research, the theoretical framework of investigative thinking styles as developed by Dean et al. [229] is applied. Second, hypotheses or research questions are needed. In this research, the research question "what" is concerned with descriptions of characteristics. Third, other research methods should also be applied. In this research, a survey is supplemented with content analysis. Forth, extra-media data should be incorporated. In this research, results from another investigation survey were incorporated [267]. Fifth, inter-coder reliability should be reported. In this research, the characteristics content construct was coded by two researchers independently. Sixth, reliability based on random sample of coded content was not relevant in this research, as there is a complete set of responses. Finally, presentations of only descriptive statistics should be avoided. In this research, two independent researchers coded characteristics by respondents.

The questionnaire was sent to 325 detectives by email. With 110 responses returned, this gave a response rate of 34%. However, only 71 detectives filled in the open space for characteristics of effective detectives, thereby reducing the response rate to 22%. Since each detective wrote five characteristics, a total of 355 characteristics were collected, as listed in Table 5.1.

Two raters were involved in the classification of responses. There was no need to develop key words in this research [269], as respondents provided responses in terms of key words. Acceptable inter-rater judgment reliability (IJR) of 0.94 was achieved. Reliability is an assessment of the degree of consistency between multiple raters of a variable [11].

As can be seen in Table 5.1, 55% of the respondents wrote *creativity* as one of the five characteristics of effective detectives. The word creativity comes from the Latin concept "creare" which means "to make" or "to create." Creative activity appears to be an affectively charged event, one in which complex cognitive processes are shaped by, cooccur with, and shape emotional experience [2]. Novelty is a key defining criterion of creativity, which means original to the individual or team producing the idea or solution [41].

Second to creativity, *professionalism* was mentioned by 24% of the investigators. Other characteristics frequently mentioned were *objectivity*, *structure*, and *organization*.

Out of 355 characteristics, 60 characteristics were classified by the raters into the method style of thinking for detectives in police investigations. 55 characteristics were classified into the challenge style, 165 into the skill style, and 75 into the risk style.

Table 5.1: Characteristics responses (5 characteristics by 71 respondents).

Objectivity	Creativity	Involvement	Patience	Initiative
Professional	Systematic	Creative	Cooperative	Motivated
Interested	Knowl-edgeable	Hardworking	Collegial	Organized
Curious	Detailed	Knowledge of law	Human intelligence	Not giving up
Patience	Good writing skills	Creative	Involved	Overview
Good to communi-cate	Good at listening	Open mind	Social abilities	Some curiosity
Be curious	Be positive	Update oneself	Positive to new methods	Ethic attitude
Analytic abilities	Simultaneous capacity	Good judgment	Knowledge	Intelligent
Human knowledge	Professional	Objective	Honest	Flexible
Curious	Human knower	Honest	Detailed	Open mind
Open mind	Professional	Systematic	Respect for people	Logic ability
Analytic	Creative	Structured	Empathy	Working correctly
Intelligent	Structured	Offensive	Listening to ideas	Creative
Tactical	Creative	Offensive	Information seeking	Objective
Experienced	Work independent	Motivated	Analytic abilities	Cooperative
Mature thinking	Hardworking	Focus on goal	Cooperative attitude	Empathy
Organized	Honest	Knowledge	Creative	Cooperative
Structure	Commu-nicative skills	Analytic ability	Patience	Humane

Table 5.1: Continued.

Objectivity	Creativity	Involvement	Patience	Initiative
Detailed	Persistent	Creative	Judge of character	Cooperative abilities
Ability to communicate	Systematic	Ability to be objective	Positive attitude	Action oriented
Creative	Involved	Structure	Goal oriented	Social
Motivated	Detail oriented	Analytical	Systematic	Professional
Holistic	Creative	Empathetic	Involved	Good writing skills
Creative	Offensive	Human	General knowledge	Interested
Correct	Organized	Objective	Effective	Hardworking
Honest	Systematic	Thorough	Identify important issues	Empathetic
Good to cooperate	Communication	Organized	Social skills	Knowledge of task
Good to communicate	Goal oriented	Creative	Good cooperative skills	Willing to work hard
Persistent	Thorough	Open mind	Creativity	Communicative
Listening	Work in team	Curious	Think about issues	Being present
Taking responsibility	High moral	Creative	Communicative skills	Analytic
Initiative	Curious	Listening	Open mind	Fair
Creative	Engaged	Good communicator	Structured	Positive
Being objective	Analytic	Systematic	Creative	Good to communicate
Structured	Analytic	Curious	Good to formulate	Awake for new things

Table 5.1: Continued.

Objectivity	Creativity	Involvement	Patience	Initiative
Objective	Creative	Patient	Offensive	Honesty
Honest and fair	Commu- nicating well	Awake and creative	Curious and interested	Creative
Interested in new ideas	Interested in knowledge	Concentrated	Methodical	Creative
Open	Organized	Detailed	Creative	Taking initiative
Good in communica- tion	Observant	Human	Smart	Tactical
Knowl- edgeable	Open and humble	Creative	Objective	Commu- nicative
Take good interviews	Se more options	Putting question marks	Communicate	Creative
Knowl- edgeable	Fair	Ambitious	Patient	Thorough
Professional	Patient	Curious	Good cooperative skills	Good to communicate
Ability to socialize	Treat with respect	Patience	Interested to learn	Creative and open
Professionally interested	Good to communi- cate	Curious	Structured	Honest
Detailed	Trustworthy	Create confidence	Communicate	Creative
Patience	Structured	Goal oriented	Feel satisfied	Feeling sympathy
Emphatic	Commu- nication skills	Good listener	Professional	Honesty
Creative	Analytical	Staying ability	Results oriented	Personal integrity
Systematic	Analytical	Creative	Offensive	Professional

Table 5.1: Continued.

Objectivity	Creativity	Involvement	Patience	Initiative
Independent	Socially skilled	Team worker	Creative	Professionally updated
Creative	Methodo-logical	Structured	Professional competent	Social intelligence
Thorough	Professional ability	Ability to care	Moving on	Ability to cooperate
Commu-nication skills	Empathy	Conscious ethics	Objectivity	Thorough
Professional knowledge	Thinking creatively	Independent	Learn new things	Critical reflection
Honest	Creative	Good cooperative skills	Systematically	Good formulating skills
Objective	Professionally involved	Creative	Structured	Empathy
Wide mind	Objective	Patient	Can communicate	Creative
Open	Involved	Creative	Good com-municator	Independent
See connections	Active contributor	Loyal to the case	Logic thinking	Good com-munication
Creativity	Motivating	Professional	Investigative	Social
High integrity	Reliable	Ability to use experience	Cooperative skills	Ability to change
Structured	Objective	Professional	Curious	Creative
Knowledge	Experience	Attitude	Overview	Patience
Personal skills	See connections	Professional	Work in teams	Creative thinking
Ability to communi-cate	Structured	Open mind	Decision oriented	Persistent
Different perspectives	Thoroughly	Creativity	Empathy	Good com-munication

Table 5.1: Continued.

Objectivity	Creativity	Involvement	Patience	Initiative
Ability to think logically	Ability to see pattern	Creative and intuitive	Social	Hunting instinct
Patient	Action driven	Commu-nicative	Creative	Not conclusive
Honesty	Respect	Loyalty	Commu-nication	Open mind

Survey results show that the most important thinking style for effective detectives is the skill style. Examples of characteristics classified as skill style include objectivity, proficiency in communication, analytic abilities, open mind, and listening skills. At the skill level of investigative thinking, detectives are concerned with how they relate to people while collecting potential evidence. Detectives must think how they are going to relate to the victim, witnesses, possible suspects, the local community, and the wider general public in order to get the information they need to make the case.

Investigation as skill emphasizes the human dimension in investigative work, particularly the personal qualities of detectives. Hence, the central characteristic in this conception is relation. That is, a detective's ability to relate skillfully to a wide variety of people and, in conformity with prevailing law and regulation, collect the information vital to the matter under investigation.

Although experienced detectives and investigators intuitively use all four thinking styles in an investigation, it is rare that any one detective will give equal weight to all four styles of investigative thinking in a particular case, because detectives, like everyone else, have a preference for maybe one or two particular styles or ways of thinking.

To summarize the findings in our survey in our own words, we will argue that the five most important characteristics of a good detective are as follows.

(1) *Good empathic communication (skill style)*. A detective should be a 'people person' or else will not be able to get the most valuable infor-mation out of a person (witness, victim, suspect, etc.), however, at the

same time he or she must know and follow the law in detail so that the acquired information is applicable in court.

(2) *Open-minded curiosity (skill style, and perhaps a bit of risk style)*. A detective should have a mind that is curious about things and open to new ways of doing things to not only discover information by making connections through being curious, but also to be open enough to avoid tunnel vision and conforming to stereotypical ideas.

(3) *Creative thinking (risk style)*. A detective should be able to think creatively about the information/evidence by putting it together in different ways or looking at it from different perspectives. This outlook forms the basis for further creative thought in how to go about getting other information/evidence needed to solve a case. Creative thinking also correlates highly with curiosity and being open-minded (characteristic 2).

(4) *Logical, methodical reasoning (method style)*. A detective should be able to logically derive what piece of evidence is available and useful in a particular case/situation and how legally to get hold of it. Hence, a detective must think things through in a methodical manner without jumping to unwarranted conclusions or developing tunnel vision about a situation or person that cannot be supported with legal and logical inferences.

(5) *Dogged determination, persistence (challenge style)*. A detective should be able to hang in for the long haul on a difficult and protracted investigation as persistence can often crack a case. However, the reason it is the last characteristic is that just being "determined" will not of itself necessarily find the information or evidence needed in an investigation. Hence, the reason for listing the other characteristics in priority order. If a detective has enough of the other characteristics, then determination is more likely to pass off in the long run.

From a management point of view, police investigation units need to be managed as knowledge organizations rather than bureaucratic organizations. When managed as a knowledge organization, the skill style of detective thinking is more likely to grow and succeed in police investigations.

While the responses to the question of characteristics of good investigators indicate that the skill style is the most important, responses to another question indicate that the risk style is the one they actually apply the most, as listed in Table 5.2.

Hence, there seems to be a discrepancy between what detectives practice and what they think is a good practice. They practice the risk style most

TABLE 5.2. Response to thinking style items in the survey.

In police investigations: (1 = completely disagree, 5 = completely agree)	Mean	Deviation
Method Style of Investigative Thinking When faced with a difficult case I prefer to figure out how to solve the crime by following the basics of police procedure	3.5	0.97
Challenge Style of Investigative Thinking I get a lot of satisfaction out of helping victims to achieve some sort of justice by bringing an alleged offender before a court	4.1	0.92
Skill Style of Investigative Thinking I keep an open mind when investigating even when certain information suggests a possible suspect or course of action	4.6	0.58
Risk Style of Investigative Thinking I keep an open mind and keep exploring various angles to find evidence	4.8	0.53

extensively, followed by the skill style. At the same time, they argue that the skill style is the most important one. This can perhaps be explained by research design limitations, assuming that it would normally seem safer to define oneself as a skilled rather than a risky detective when performing self assessment by responding to an open-ended question. Nevertheless, they are able to rate the importance of risk when it is linked to a situation and not to their own personality.

The most effective thinking style of detectives as knowledge workers was empirically found to be the skill level. While an investigation involves an evidence-gathering enterprise by human beings, the conception of a detective in the knowledge organization emphasizes the quality of who is doing the gathering. Surprisingly, the same detectives claim that they apply the risk style more than the skill style. Detectives see an investigation as going nowhere unless they are able to extract good quality information out of people and their ability to do that depends on the quality of detectives' relational skill particularly with regard to communicating well with people.

5.9. The Case of Lawyers as Information Sources

Sometimes, lawyers and notaries are potentially excellent information sources about organized crime. The case of Evert Hingst, although

exceptional in many ways, reflects the fact that people who render financial and legal services may play a vital role within and between criminal networks [93].

> On Monday, 31 October 2005, 36-year old Dutch lawyer Evert Hingst was murdered in front of his house in Amsterdam. Among Hingst's clients were many noted and alleged criminals, including John Mieremet, who was once shot in front of Hingst's office. After this assault, Mieremet claimed that Hingst had tried to set him up. Mieremet was murdered 3 days after the liquidation of Hingst, on 2 November, in Thailand. Hingst, a fiscal specialist, had been accused of assisting criminals to launder their money abroad. He was imprisoned for several weeks after police discovered three firearms and a large sum of cash during a raid of his office in 2005. A suspect of money laundering, membership of a criminal organization and possession of firearms, Hingst gave up his profession as a lawyer in July 2005. He had previously been arrested on charges of forgery of documents in 2005.

The lawyer Evert Hingst could be ulinked to Hells Angels Holland through John Mieremet and Willem Holleeder. Willem "The Nose" Holleeder is a Dutch criminal born on May 29, 1958 in Amsterdam. He was one of the perpetrators of the kidnapping of brewery president, Freddy Heineken in 1983, for which Holleeder received a jail sentence of 11 years. He is assumed to be responsible for extortions of various real estate magnates, including Willem Endstra, who was murdered in 2004. A total of twenty-four people are suspected of being part of a crime ring controlled by Holleeder. The nickname of "The Nose" is because of the size of Holleender's nose (http://www.wikipedia.org/).

With companions, Sam Klepper, John Mieremet, and his later brother-in-law Cor van Hout, Holleeder was already in the 1970s member of an opportunity-based criminal organization. They carried out armed robbery more or less at random. At the age of 18 they had already enough money to drive around in expensive cars. The kidnapping of Heineken in 1983 gave them a ransom of 16 million euros (http://www.wikipedia.org/).

In 2002, Holleeder came in the news when the monthly magazine Quote printed a photo of Holleeder accompanied by Endstra. Endstra was regarded as "the banker" of the Dutch underworld. Endstra laundered drug money and invested it in real estate. Holleeder ordered the extortion of Endstra in 2004 after Endstra started to give information to the Dutch national police. Hells Angels carried out the extortion, because

Holleeder enjoyed significant influence in the criminal motorcycle club (http://www.wikipedia.org/).

Nelen and Lankhorst [93] argue that lawyers and notaries sometimes are facilitators of organized crime. Culpable involvement of lawyers and notaries in organized crime tends to come from occasional cases in which they are involved. Culpable involvement of lawyers tends to be in systematic mortgage frauds and huge sums of money transferred through law firms. Culpable involvement of notaries tends to be in transactions on the property market, the establishment of legal entities to shield criminal activities, and drafting fraudulent deeds to enable money laundering.

6 Enforcing Law on Criminal Business

When FBI [252] launched their law enforcement strategy to combat international organized crime, they emphasized four priority areas of action against international organized crime.

- *Marshal information and intelligence.* Collect, synthesize, and timely disseminate the best available information and intelligence from multiple sources—including law enforcement, the intelligence community, foreign partners, and the private sector—to optimize law enforcement's ability to identify, assess, and draw connections among nationally-significant international organized crime threats.
- *Prioritizing and targeting the most significant international organized crime threats.* Select and target for high-impact law enforcement action the international organized crime figures and organizations that pose the greatest threat to USA, and ensure the national coordination of investigations and prosecutions involving these targets.
- *Attack from all angels.* Employ all available law enforcement and non-law enforcement tools—including drawing upon the unique expertise of every participating US law enforcement agency in domestic operations, partnering with foreign counterparts to pursue cases at home and abroad, and employing US government sanctions and advisories—all in a crosscutting effort to disrupt international organized crime activity.
- *Enterprise theory.* Develop aggressive strategies for dismantling entire criminal organizations, especially their leadership, by using proactive investigative techniques and multi-layered prosecutions.

The senior investigating officer (SIO) is in charge of a criminal investigation in law enforcement. As the leader of a crime solving project, it has

been argued that the SIO needs investigative ability, crime knowledge, as well as management skills. An empirical study in Norway was conducted, indicating that management skills are more important than crime knowledge and investigative ability. Furthermore, among management roles, the motivating role of personnel leader was found to be most important for effective SIOs.

6.1. Administrative Approach to Organized Crime

The concept of an administrative approach to organized crime was developed in New York City two decades ago. Complementing a very intensive criminal policy, administrative measures enabled the authorities to break the positions of power of the five big Mafia families in the city. The administrative approach consists of a number of instruments, ranging from the integrity testing of civil servants, the purchasing of strategically-positioned buildings, and the refusal or withdrawal of permits, to the screening of companies who compete for major contracts [92].

One decade later, the administrative approach to organized crime was introduced in the city of Amsterdam. The Amsterdam administrative approach had a different background [92].

Because of the specific problems in the red-light district, Amsterdam city council emphasized that additional administrative attention should be devoted to this part of the city centre and called for the appointment of a so-called red-light district manager.

According to Nelen and Huisman [92], the administrative approach to organized crime is in line with recent developments in the context of situational crime prevention. Administrative intervention strategies aim at criminal organization deterioration, organized crime decline, crime profit collapse and reduction in criminal business enterprises. In Amsterdam more than 56 buildings were acquired by the city authorities from criminal business enterprises. Four illegal casinos and several establishments in the hotel and restaurant industries were closed down. More than 20 licenses for bars and restaurants were refused or withdrawn, and eight permits in the catering industry were withdrawn. The licenses of the key players in the sex industry in the red-light district are withdrawn until the entrepreneurs concerned are able to submit a transparent accounting result [92].

According to Bunt and Schoot [198], case studies of organized crime show that the illegitimate and legitimate environments intermingle. Although these interfaces are a threat to the legitimate world, they also offer
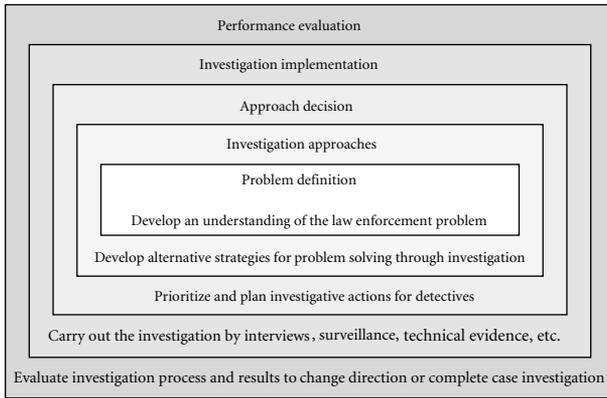
FIGURE 6.1. The knowledge organization of police investigations as value shop activities.

opportunities for prevention. The message in their research is that if criminal organizations are able to easily acquire or access resources, then the number of these resources should be reduced or made more difficult to acquire or access. Their study identified opportunities that facilitate organized crime and presented measures to prevent them.

Schoot [134] phrased the question: What is the effectiveness of organized crime prevention? Their research examined the possible effectiveness of three preventive measures taken against organized crime in the Netherlands: the anti-money laundering intervention, the screening and auditing approach and the administrative approach of the City of Amsterdam. By assessing the program theory, the program process and the program impacts, they determined plausible outcomes and observed outputs. Together these outcomes and outputs determine the possible effectiveness of the preventive measures.

6.2. Investigation Value Shop

Police Investigations have the value configuration of a value shop [3]. As can be seen in Figure 6.1, the five activities of a value shop are interlocking and while they follow a logical sequence, much like the management of any project, the difference from a knowledge management perspective is the way in which knowledge is used as a resource to create value in terms of results for the organization. Hence, the logic of the five interlocking value shop activities in this example is of a police organization and how it engages in its core business of conducting reactive and proactive investigations.

The sequence of activities starts with problem understanding, moves into alternative investigation approaches, investigation decision, and investigation implementation, and ends up with criminal investigation evaluation. However, these five sequential activities tend to overlap and ulink back to earlier activities, especially in relation to activity 5 (control and evaluation) in police organizations when the need for control and command structures is a daily necessity because of the legal obligations that police authority entails. Hence, the diagram is meant to illustrate the reiterative and cyclical nature of these five primary activities for managing the knowledge collected during and applied to a specific police investigation in a value shop manner. Furthermore, Figure 6.1 illustrates the expanding domain of the knowledge work performed in police investigations, starting in the centre with problem understanding and ending at the edge with evaluation of all parts of the investigation process.

These five primary activities of the value shop in relation to a police investigation unit can be outlined as follows [3].

(1) *Problem Definition.* This involves working with parties to determine the exact nature of the crime and hence how it will be defined. For example, a physical assault in a domestic violence situation depending on how the responding officers choose and/or perceive to define it can be either upgraded to the status of grievous bodily harm to the female spouse victim or it may be downgraded to a less serious common, garden variety assault where a bit of rough handing took place towards the spouse. This concept of making crime, a term used on how detectives choose to make incidents into a crime or not, is highly relevant here and is why this first activity has been changed from the original problem finding term used in the business management realm to a problem definition process here in relation to police work. Moreover, this first investigative activity involves deciding on the overall investigative approach for the case not only in terms of information acquisition but also as indicated on Figure 1.1 in undertaking the key task, usually by a senior investigative officer in a serious or major incident, of forming an appropriate investigative team to handle the case.

(2) *Investigation Approaches.* This second activity of identifying problem solving approaches involves the actual generation of ideas and action plans for the investigation. As such it is a key process for it sets the direction and tone of the investigation and is very much influenced by the composition of the members of the investigative team. For example, the experience level of investigators and their

preferred investigative thinking style might be a critical success factor in this second primary activity of the value shop.

(3) *Approach Decision.* This solution choice activity represents the decision of choosing between alternatives generated in the second activity. While the least important primary activity of the value shop is in terms of time and effort, it might be the most important in terms of value. In this case, trying to ensure as far as is possible that what is decided on to do is the best option to follow to get an effective investigative result. A successful solution choice is dependent on two requirements. First, alternative investigation steps were identified in the problem solving approaches activity. It is important to think in terms of alternatives. Otherwise, no choices can be made. Next, criteria for decision-making have to be known and applied to the specific investigation.

(4) *Investigation Implementation.* As the name implies, solution execution represents communicating, organizing, investigating, and implementing decisions. This is an equally important process or phase in an investigation as it involves sorting out from the mass of information coming into the incident room about a case and directing the lines of enquiry as well as establishing the criteria used to eliminate a possible suspect from further scrutiny in the investigation. A miscalculation here can stall or even ruin the whole investigation. Most of the resources spent on an investigation are used here in this fourth activity of the value shop.

(5) *Performance Evaluation.* Control and evaluation involves monitoring activities and the measurement of how well the solution solved the original problem or met the original need. This is where the command and control chain of authority comes into play for police organizations and where the determination of the quality and quantity of the evidence is made as to whether or not to charge and prosecute an identified offender in a court of law.

6.3. Organized Crime Investigation Flow Chart

Policing organized crime requires a structured, yet flexible, procedure as illustrated in the organized crime investigation flow chart. It represents a checklist in a certain sequence to determine whether it is organized crime as well as crime severity. A distinction is made between absolute requirements and questions guiding the investigation.

A flow chart is a schematic representation of an algorithm or a process. A flow chart is a method to monitor a process. It typically has a start and

an end. Arrows represent flow of control, while boxes represent processing steps. In the flow chart, each processing step results in a conditional question, where Yes and No are alternative answers leading to different paths in the flow chart.

The first question "Serious criminal activity?" refers to a single incident, where a No-answer would lead to the next question "Series of offenses?" while a Yes-answer would lead to the question "Repetition likely?" This initial decision sequence in the flow diagram indicates that either is one single criminal activity serious, or there is a series of minor offenses, to move on in the diagram. Exit from the diagram will occur if there is only a single, minor criminal activity. Exits are indicated by a circular symbol.

The proposed flow chart is not universal. Rather, it is contingent on expertise and situation. Experts in law enforcement in a country or region may have different decision texts in decision boxes. We do not argue with them, as the text in the boxes in our flow chart represents examples of Yes-No decision points rather than a universal template.

Therefore, our idea is to present the flow chart approach in general to law enforcement. Because of the definitional problems of organized crime and criminal organizations that have plagued both theory and practice for several decades, the flow chart represents an alternative approach to identify organized crime in a structured and sequential fashion.

If we start randomly in the middle of the flow chart at "Violence or threats?" assuming that the investigation of a criminal activity has lead to this decision point, a No-answer would lead to termination in the sense of rejecting the organized crime hypothesis. On the other hand, a Yes-answer would maintain the organized crime hypothesis into the next decision question "Organization still exists?" meaning that the existence of involved criminals is still active.

At the end of the flow chart, the final control question is phrased "Surely organized crime?" If the answer is Yes, investigators might be completely sure that the initial crime observed is part of organized crime by a criminal organization.

6.4. Law Enforcement Road Map

In addition to the flow chart determining the extent and severity of organized crime, there is a need for a systematic approach to fight organized crime by law enforcement. We call it a road map, where law enforcement starts by determining an ambition level for policing organized crime. An
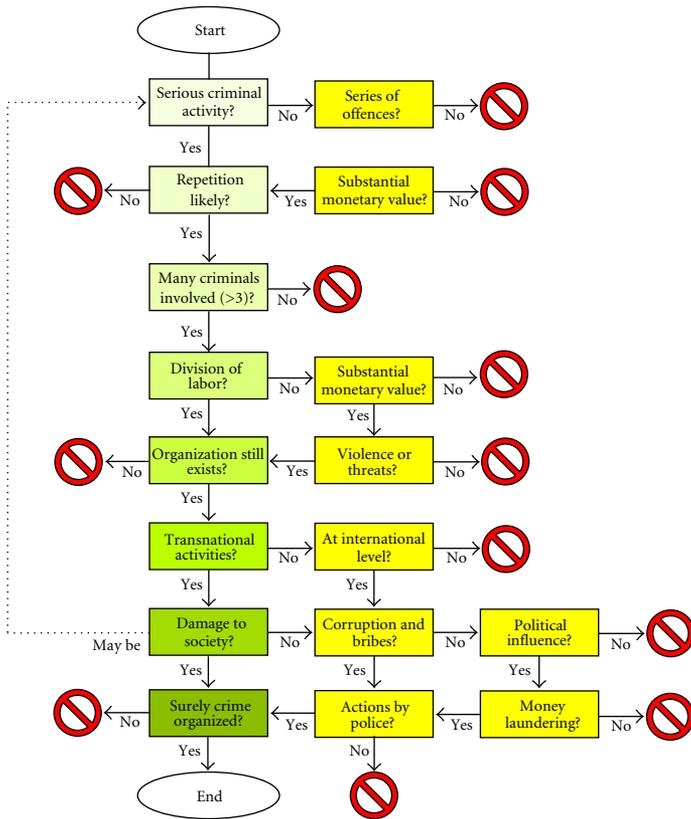
FIGURE 6.2. Organized crime investigation flow chart.

extreme, ultimate ambition would be to prevent that organized crime from developing into criminal organizations, as illustrated in Figure 6.2.

A road map represents a diagnostic and assessment-based framework for consolidating efforts, reflecting the collective engagement experiences of all law enforcement stakeholders. A road map is a visual representation of phases and factors in a plan. The road map for fighting organized crime consists of four phases, and it is catalyzed by four critical success factors. The four phases are as follows.

(1) *Ambition phase.* The strategic ambition phase is where politicians and executive police management develop a strategy to fight organized crime. Several documents may result in this phase. For example, the Government may supply the Parliament with a document, where

the issues and priorities are lined up. Often, such a document is so generally formulated that it is of low value to policing. However, the political document might be followed by a more specific document by the Police Directorate formulating goals and local documents in Police Districts formulating actions. The different document levels—politics, directorate, constabulary—need to integrate with each other, while they often do not do. To secure alignment of political ambitions, criminology ambitions, social ambitions, policing ambitions, and other ambitions related to organized crime, alignment mechanisms such as content analysis, milestones, goals, and evaluations should be institutionalized.

(2) *Analysis phase*. The strategic analysis phase is concerned with understanding and insights. Too often, failing actions are based on fragmented or completely missing analysis. When fighting street gangs based on ethnic backgrounds, it is sometimes compared to fighting local Hells Angels chapters. Nothing could be more wrong. While street gangs have to be understood in a context of temporary and dynamically changing relationships and finances, MC groups have to be understood as more permanent structures and finances. Understanding both similarities and differences between criminal organizations is critical in successfully fighting organized crime. Understanding differences between criminal industries such as commerce versus robbery is crucial in selecting appropriate and contingent policing actions.

(3) *Project phase*. Before moving into operations, policing actions should be organized as projects. Fighting a criminal organization successfully is normally not a matter of quick policing raids and interrogations. Rather, it is about removing the foundations for their operations. Both at the top and at the bottom, criminals have to be removed. Valuables belonging to the criminal organization have to be removed, and the markets, on which it operates, have to be closed down. To coordinate such a diversity of actions, a project structure should be put in place. A project has a goal, it is a coordinated undertaking of interrelated activities, it has limited duration, and it is unique in the sense of fighting a specific criminal organization or a specific kind of organized crime.

(4) *Evaluation phase*. In the evaluation phase, project results are evaluated. Evaluation does not have to wait until the project duration is expired. Rather, all major deviations from project plan should be studied. If the goal was to close down a criminal Hells Angels Motorcycle chapter in one city, and this goal was achieved, it may not
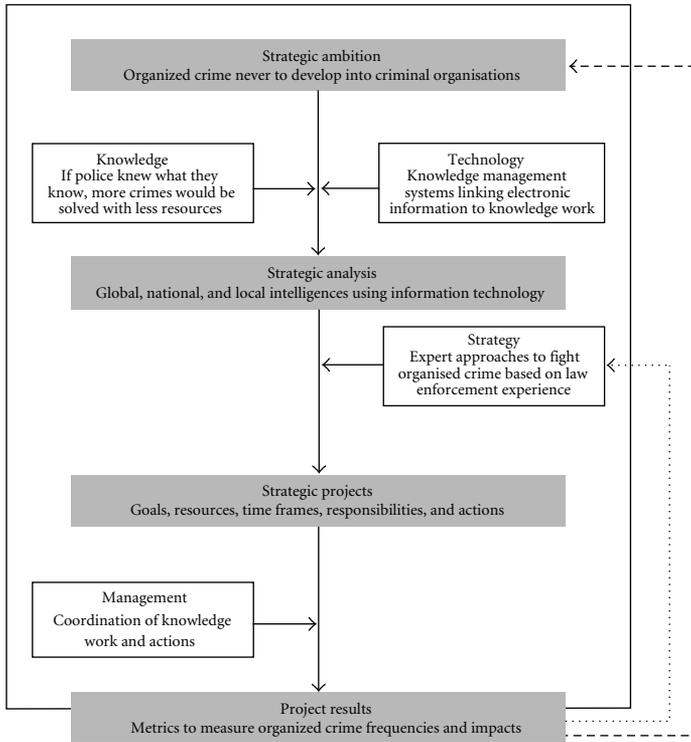
FIGURE 6.3. Law enforcement road map.

be satisfactory if a new chapter is established in another city with the same gang members. Therefore, one needs not only to look at project goals, but also at ambitions from the ambition phase, when evaluating project performance, as the project is just one stone in building a safe and non-criminal society.

The road map consists of the following four critical success factors.

(a) *Knowledge*. Basic knowledge in policing includes criminology, psychology, sociology, and law. To fight organized crime, required knowledge includes management science, organizational theory, accounting, finance, and business administration.

(b) *Technology*. Information systems have to be available to both analysts and project participants. Systems should cover all four stages in the

knowledge management technology stage model: officer-to-tools systems, officer-to-officer systems, officer-to-information systems, and officer-to-application systems. For example, geographic information systems with information from various sources might be combined into a complete picture of activities for simulation and prediction of organized crime.

(c) *Strategy*. Based on experience, police officers have an understanding of what works and what does not work. Strategy is about approaches that work. For example, the national intelligence model in the UK represents a collection of approaches based on experience [207]. Strategy is here a choice of approaches to fight organized crime, where the choice is a selection from a wider set of alternatives.

(d) *Management*. Leadership is required to coordinate knowledge work and policing actions when fighting organized crime. Management is both about individuals and tasks. Individuals may be both experts and newcomers that are in need of very different kinds of coaching and feedback. Tasks may be both small and large that are in need of very different kinds of planning and evaluation.

6.5. Senior Investigating Officer

The performance of the police in the area of investigation is continually under scrutiny by the government, the criminal justice system, and the media. There is a widespread recognition within the police service that there is a need to improve the professionalism of the investigative response. In the UK, the professionalizing investigation program was introduced in 2005. The purpose is to significantly improve the personal, functional, and organizational ability of the service to investigate any crime of any category. In performance terms the aim of the program is to deliver the following [21]:

- improved rates of crime detection;
- improvement in the quality of case files;
- a reduction in the number of failed trails;
- improved levels of judicial disposal;
- increased public confidence in the police service.

The long-term outcomes of the program shall deliver the professional development of staff against robust national occupational standards by developing police staff that is better qualified and thereby better skilled in investigation, more focused training for investigation, and minimal accreditation bureaucracy.

In all complex or serious cases, on which a team of investigators is deployed, the senior investigating officer sets out what the main lines of enquiry are, and record his or her decisions on those lines of enquiry as the investigation progresses. For example, the SIO directs which policy decisions are recorded in the HOLMES system in the UK. The Major Incident Policy Document is maintained whenever a Major Incident Room using HOLMES system is in operation [20].

The SIO plays a pivotal role within all serious crime investigations. Concerns have been expressed, however, that there is a shortage of investigators with the appropriate qualities to perform this role effectively. The consequences of such a shortage could be severe. Not only might it threaten the effective workings of the judicial process, it can also waste resources, undermine integrity, and reduce public confidence in the police service. The principal aim of the research conducted by Smith and Flanagan [149] was to establish what skills, abilities, and personal characteristics an SIO ought to possess to be effective in the investigation of low-volume serious crimes (stranger rape, murder, and abduction). Interviews were conducted with 40 officers from ten forces in the UK. These were selected to reflect a range of roles and experience with Criminal Investigation Departments (CID). Ten of these officers were nominated by their peers as examples of particularly effective SIOs.

Although the debate around SIO competencies has often polarized into arguments for and against specialist or generalist skills, the research highlighted the fact that the role of an SIO is extremely complex and the skills required wide-ranging. By applying a variety of analytical techniques, a total of 22 core skills were identified for an SIO to perform effectively in the role. The 22 skills were organized into three clusters as follows.

- *Investigative ability*. This includes the skills associated with the assimilation and assessment of incoming information into an enquiry and the process by which lines of enquiry are generated and prioritized.
- *Knowledge levels*. This relates to the different types of underpinning knowledge an SIO should possess.
- *Management skills*. These encompass a broad range of skill types that were further sub-divided between people management, general management, and investigative management.

The research revealed that the effective SIO is dependent upon a combination of management skill, investigative ability, and relevant knowledge across the entire investigative process, from initial crime scene assessment through to post-charge case management.

Ideally, an SIO should possess a high level of competency across each of the three clusters. In reality this is not always possible and, when this happens, there is an increased risk that the investigation will be inefficient or, in the worst case, will fail.

For example, an SIO from a predominantly non-CID background will have little experience within an investigative context. Hence there is an increased risk that an investigation will fail due to sub-optimal investigative decisions being made. Similarly, an SIO from a predominantly CID background may have less general management experience. Hence there may be an increased risk of failure from sub-optimal management decisions.

The research suggested that some—but not all—deficiencies in an SIO's skill portfolio can be compensated for by drawing on the skills and abilities of more junior officers within their investigative team. However, it was recognized that this was still a high-risk and short-term strategy.

In police investigations the manager of an investigative unit is generally referred to as an SIO. This is a middle management type position in the command and control hierarchy of a police organization. Such a middle ranking position carries much responsibility for making sure an investigation stays on track, within budget and produces good results in terms of evidence and prosecution. Such responsibility places strong leadership demands on an SIO. Hence, Mintzberg's [85] research on management roles is relevant and provides a firm basis on which to appreciate and understand the inter-related activities of a manager.

A manager's job consists of several parallel roles. At a certain point in time, the manager may perceive one role as more important than the others. Mintzberg [85] found that it is a peculiarity of the management literature that its best-known writers all seem to emphasize one particular part of the manager's job to the exclusion of the others. Together they cover all the parts, but even that may not describe the whole task of managing.

Mintzberg's role typology is frequently used in studies of managerial work. When such role terminology is applied to a police investigation context, some modification is required as an SIO will not necessarily be responsible for all aspects of each role. Furthermore, business management terminology does not fit so well in a policing and law enforcement domain. Hence, some of the role labels have been changed to provide a more accurate fit with police terminology.

These six police manager roles, adapted from Gottschalk [3], are briefly described below along with the police-specific role label noted in brackets.

- **Personnel leader** (**Motivating Role**). As a leader, the manager is responsible for supervising, hiring, training, organizing, coordinating, and motivating a cadre of personnel to achieve the goals of the organization. This role is mainly internal to the police investigation unit. As stated previously, an SIO would not generally be responsible for hiring a particular individual in a business sense, but would have a say in which particular police investigator might join his team for a particular investigation. However, the main thrust of this role for an SIO is that of motivating their staff and keeping such motivation up especially in a difficult and protracted investigation.
- **Resource allocator** (**Resourcing Role**). The manager must decide how to allocate human, financial and information resources to the different tasks of the investigation. This role emphasizes planning, organizing, coordinating, and controlling tasks, and is mainly internal to the police investigation unit. Often, an SIO has to be an advocate in this regard to get the necessary resources for his team to be able to conduct the investigation efficiently and effectively.
- **Spokesperson** (**Networking Role**). As a spokesperson, the manager extends organizational contacts to areas outside his or her own jurisdiction. This role emphasizes promoting acceptance of the unit and the unit's work within the organization of which they are part. For the manager it means contact with the rest of the organization. Frequently, he or she must move across traditional departmental boundaries and become involved in personnel, organizational, and financial matters. Hence, with regard to an SIO this key role is one of networking within the police organization.
- **Entrepreneur** (**Problem-solving Role**). The manager identifies the police needs and develops solutions that change situations. A major responsibility of the manager is to ensure that rapidly evolving investigation methods are understood, planned, implemented, and strategically exploited in the organization. Such a role is more akin to being a problem-solver than an entrepreneur in a police setting.
- **Liaison** (**Liaising Role**). In this role, the manager communicates with the external environment, and it includes exchanging information with government agencies, private businesses, and the media. This is an active, external role. This is a very similar role description for an SIO who has to liaise with a wide range of people throughout an investigation who are external to the police service like the public prosecutors office but which are part of the overall criminal justice system.
- **Monitor** (**Gatekeeping Role**). This role emphasizes scanning of the external environment to keep up with relevant changes, such as politics

and economics. The manager identifies new ideas from sources outside his or her organization. To accomplish this task, the manager uses many resources, including vendor contacts, professional relationships, and a network of personal contacts. While an SIO clearly monitors the progress or otherwise of an investigation, the role description here is more like a gatekeeping role. In that it is not so much external politics or economics, which an SIO has to contend with but rather making sure the media and other outside forces do not disrupt the progress on an investigation. Hence, in that sense this is a gatekeeping role to protect the investigative team and undue external pressure.

These six police manager roles are illustrated in Figure 6.4. As can be seen, the motivating and resourcing roles are internal to the investigation team for the SIO. The networking and problem-solving roles are directed towards the police organization, and the liaising and gatekeeping roles are ulinked to the external environment for the SIO.

We would expect that these roles are not equally important for an SIO in relation to creating investigative success. Moreover, some roles may be more influential in terms of stimulating knowledge sharing. For example, adopting a motivating role may be more important for an SIO to engage in within the investigative team, but not as important in relation to the wider police organization. There is some research that suggests that the networking role (or spokesperson) is the most important for dealing with the larger organization when knowledge is communicated to stakeholders [55].

A survey instrument was applied in this research, where respondents filled in a space. In the open electronic space, respondents could write five characteristics in their own wording. To classify these responses, content analysis was needed. According to Riffe and Freitag [126], seven features of content analysis distinguish poor studies from excellent studies. First, an explicit theoretical framework is needed. In this research, the theoretical framework of management roles as developed by Mintzberg [85] is applied. Second, hypotheses or research questions are needed. In this research, the research question "what" is concerned with descriptions of characteristics. Third, other research methods should also be applied. In this research, a survey is supplemented with content analysis. Forth, extra-media data should be incorporated. In this research, results from another investigation survey were incorporated [267]. Fifth, inter-coder reliability should be reported. In this research, the characteristics content construct was coded by two researchers independently. Sixth, reliability based on random sample of coded content was not relevant in this research, as there

Police management: role activities in investigation process
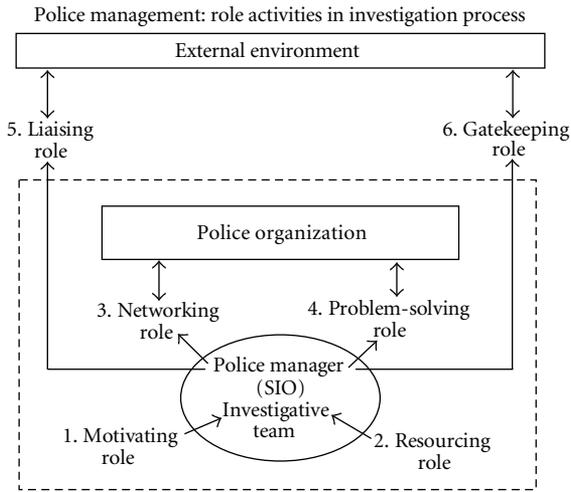
Figure 6.4. Police manager roles in investigations. (Adapted by Dean [229] from Karlsen and Gottschalk [189].)

is a complete set of responses. Finally, presentations of only descriptive statistics should be avoided. In this research, two independent researchers coded characteristics by respondents, and interpretations are presented in this paper.

The questionnaire was sent to 325 detectives by email. With 110 responses returned, this gave a response rate of 34%. However, only 71 detectives filled in the open space for characteristics of effective detectives, thereby reducing the response rate to 22%. Since each detective wrote five characteristics each, a total of 355 characteristics were collected, as listed in Table 1.1.

Two raters were involved in the classification of responses. There was no need to develop key words in this research [269], as respondents provided responses in terms of key words. Acceptable inter-rater judgment reliability (IJR) of 0.94 was achieved. Reliability is an assessment of the degree of consistency between multiple raters of a variable [11].

As can be seen in Table 6.1, most respondents provided 5 characteristics of effective SIOs as requested. Only three respondents provided 4 characteristics. A total of 352 characteristics represent our data in this research. Respondents were not asked to prioritize their five characteristics. Therefore, all 352 characteristics are treated as equally important in this research.

Table 6.1: Characteristics of effective SIOs according to respondents (5 characteristics by 71 respondents).

Objectivity	Cooperative skills	Authority when needed	Keeping overview	Organiza-tional skills
Creative	Investigative knowledge	Cooperative skills	Organiza-tional skills	Motivational skills
Creative	Motivational skills	Listening skills	Participating in work	Managing the case
Curious	Detailed	Knowledge of law	Not giving up	Human knowledge
Motivational skills	Inspirational	Professional	Patient	
Open mind	Commu-nicative skills	Empowering skills	Exploring personnel	Analytic skills
Commu-nicative skills	Feedback skills	Identifying connections	Investigative knowledge	Resisting pressure
Experience	Broad competence	Action oriented	Under-standing the case	
Commu-nicator	Good listener	Ability to motivate	Avoiding details	Creating ideas
Investigative insights	Integrity	Ability to listen	Judgment	Decision maker
Analytic skills	Creative	Systematic	Showing empathy	Good leader
Objective	Sensitive	Analytic	Structured	Creative
Listening to others	Experienced in the field	Motivational	Good mood	Make decisions
Ability to lead	Find good solutions	Value employees	Cooperation	Good mood every day
Clever at organizing	Clear speech	Cooperative	Creative	Lots of experience
Good organized	Speed	Knowl-edgeable	Good memory	Divide work
Good overview	Delegation skills	Analytic ability	Team leadership	Motivational skills

Table 6.1: Continued.

Objectivity	Cooperative skills	Authority when needed	Keeping overview	Organizational skills
Stimulate officers	Delegate	Humor	Structured	
Ability to communicate	Positive attitude	Flexibility	Investigative knowledge	Involvement
Structure	Goal oriented	Self confidence	Engaged	Creative
Motivational	Engaged	Analytic	Professional skills	Systematic
Seeing the whole picture	Motivator	Good at delegating	Good feedback	Does care
Ability to supervise	Knowledge of the cases	Ability to delegate	Investigative knowledge	Open minded
Openness	Organized	Motivating	Results oriented	Fair
Systematic	Thorough	Honest	Calm	Empathetic
Objectivity	Good at listening	Good mood	Ability to prioritize	Having good overview
Motivational	Systematic	Good communication	Human	Balanced
Concrete	Caring	Thorough	Open to proposals	Experience
Patient	Seeking options	Listening	Motivational	Giving feedback
Results oriented	Not afraid	Communicative skills	Stimulate employees	Action oriented
Leadership skills	Offensive	Active	Curious	Fair
Cooperative skills	Structured	Creative	Listening	Engaged
Investigative insights	Ability to receive	Ability to systematize	Ability to delegate	Ability to motivate
Structured	Investigative knowledge	Fair	Positive attitude	Ability to have oversight

Table 6.1: Continued.

Objectivity	Cooperative skills	Authority when needed	Keeping overview	Organizational skills
Understanding people	Honesty	Offensive	High moral	Objective
Creative	Encouraging	Open	Knowledgeable	Overview
Cooperative skills	Sees person potential	Ability to listen	Tactical	Open to new ideas
Knowledgeable of law	Delegating	Being creative	Make decisions	Motivate officers
Ability to see all	Ability to inspire	Ability to listen	Ability to implement	Ability to correct
Professional	Decision oriented	Engaged	Motivational	Team leader
Human	Professional	Openness	Honesty	Energy
Investigative insights	Motivational	Including	Ability to delegate	Goal oriented
Broad experience	Ability to cooperate	Listen to others' opinions	Being explicit	Ability to delegate
Open mind	Good at communicating	Decision minded	Investigative knowledge	Present
Distribute tasks	Thinking creatively	Good monitoring	Good consulting	Thinking new
Having good overview	Give credit and criticism	Good at encouraging	Suggesting solutions	Ability to cut the crap
Mature soul	Investigative level	Good organizer	Communicative skills	Contribute to openness
Communication	Humility	Authority	Self insight	Humor and good mood
Open to proposals	Let others lead	Give feedback	Push progress	Make decisions
Systematic	Analytic	Creative	Determined	Knowledgeable

Table 6.1: Continued.

Objectivity	Cooperative skills	Authority when needed	Keeping overview	Organizational skills
Good team leader	Stimulating creativity	Having overview	Open minded	Patient
Motivator	Keeping calm	Decision power	Creative	Listening
Objectivity	Listen	Leading	Think new	Cooperation
Professional skills	Thorough	Create team feeling	Ability to motivate	Analytic ability
Motivational	Ability to stimulate	Communicative skills	Including personnel	Systematic
Leadership skills	Investigative skills	Organizational skills	Creative	Supervising skills
Stimulating team	Full of initiatives	Knowledgeable	Involving officers	Clear messages
Listening	Relevant attitude	Objective	Humble	Person oriented
Open	Creative	Innovative	Inspirational	Integrity
Knowing how to motivate	Able to cooperate	Thinking creatively	Being structured	Being effective
Creative	Motivational	Listening	Social	Investigative competent
Integrity	Objective	Cooperative skills	Reliable	Experience
Objective	Motivational	Structured	Competent	Thinking systematically
Investigative strengths	Ability to lead	Having good overview	Being creative	Good to communicate
Knowledge	Experience	Attitude	Patience	Overview
Ability to motivate	Ability to listen	Investigative competence	Identifying limitations	Creativity
Good to communicate	Ability to delegate	Ability to prioritize	Decision power	Ability to cooperate

Table 6.1: Continued.

Objectivity	Cooperative skills	Authority when needed	Keeping overview	Organiza-tional skills
Ability to motivate	Ability to be critical	Decision making ability	Ability to delegate	Ability to evaluate
Ability to motivate	Having patience	Relevant experience	Being team oriented	Listen to others
Motivator	Listening	Supervising	Create good environment	Let all in the team act
Focus	Cooperative skills	Knowledge	Creativity	Humility

Our first analysis was simply to look for words, which were mentioned by several respondents. We find words such as "creativity," "communication," and "cooperation," indicating that the manager of the investigation should contribute with new ideas (creativity), should talk to people (communication) and should work with people (cooperation).

Our second analysis was concerned with person focus versus task focus. It was assumed that SIOs tend to be task focused, while investigators would like them to be more person focused. When classifying all responses in Table 1.1 along these two categories, we found that 54% of the statements are person focused, while 46% are task focused.

Our third analysis was classification of items in Table 6.2 according to management areas. We make distinctions between four management areas:

- *task management*: managing the tasks of the investigation;
- *person management*: managing the officers involved in the investigation;
- *administration management*: managing the systems supporting the investigation;
- *Strategy management*. Managing the direction of the investigation.

When independent raters applied this classification scheme to the 352 items in Table 1.1, the following distribution emerged:

- 40 percent of the characteristics were assigned to *person management*;
- 30 percent of the characteristics were assigned to *task management*;

TABLE 6.2. Measurement of management roles.

Management roles in police investigations	Mean
Motivating role—responsible for guiding and follow-up personnel who participate in the investigation	4.7
Resourcing role—making decisions about allocation of resources in the investigation	4.8
Networking role—informing other involved units in the Police about the investigation	4.4
Problem-solving role—identifying opportunities and initiatives in the investigation	5.0
Liaising role—managing information & knowledge about external matters that might be relevant for the investigation	4.6
Gatekeeping role—communicating with the external environment about the progress in the investigation	4.4

(Scale: 1 = not important to 7 = very important)

- 18 percent of the characteristics were assigned to *strategic management*;
- 12 percent of the characteristics were assigned to *administrative management.*

The fourth analysis was concerned with our adoption of Mintzberg's [85] management roles into motivating role, resourcing role, networking role, problem-solving role, liaising role, and gatekeeping role. Although not explicitly asked for, characteristics of effective detectives can be interpreted in terms of their importance to the management roles. Each characteristic might be assigned to one of the roles according to the importance of the characteristic in that specific role. This was done in the research, which resulted in the following distribution:

- 38 percent of the characteristics were assigned to the motivating role of *personnel leader*;
- 23 percent of the characteristics were assigned to the resourcing role of *resource allocator*;
- 11 percent of the characteristics were assigned to the networking role of *spokesperson*;

- 19 percent of the characteristics were assigned to the problem-solving role of *entrepreneur*;
- 5 percent of the characteristics were assigned to the liaising role of *liaison*;
- 4 percent of the characteristics were assigned to the gatekeeping role of *monitor*.

The fifth and final analysis was concerned with the distinction between investigative ability, knowledge levels, and management skills, as suggested by Smith and Flanagan [149]. When these three categories were applied to Table 1.1, we found 38% investigative ability, 9% knowledge, and 53% management skills as characteristics of effective SIOs as defined by investigators.

Survey results indicate that the most important leadership role for SIOs is the motivating role of the personnel leader. In this role, the SIO is responsible for the supervising, hiring, training, organizing, coordinating, and motivating a cadre of personnel to achieve the goals of the organization. This role is mainly internal to the police investigation unit. As stated previously, an SIO would not be generally be responsible for hiring a particular individual in a business sense, but would have a say in which particular police investigator might join his team for a particular investigation. However, the main thrust of this role for an SIO is that of motivating his/her staff and keeping such motivation up especially in a difficult and protracted investigation.

In different study, Glomseth et al. [267] asked SIOs how they would rate the importance of each leadership role. Their results are listed in Table 6.2. SIOs themselves find the problem-solving role most important (5.0), followed by the resourcing role (4.8).

When compared to the current responses from detectives, we find some interesting results. While the SIOs do not find the motivating role particularly important, detectives that are supervised by SIOs find this role most important. Opposite, while SIOs find the problem-solving role most important, detectives do not find this role particularly important.

When combining the results from all five analyses, we find that an effective detective is characterized by being person focused in person management as a personnel leader with management skills.

Two important limitations in the current study have to be addressed. First, the response rate of 22 percent is low. As there were no follow-ups in the survey administration, and responding to each open-ended question was voluntary, the response rate as such is as expected. However, a bias in responses is not unlikely, limiting the possibility of generalized findings.

For example, only detectives with strong opinions about leadership and management may have articulated their views in the survey. Future research designs should strive for higher response rates and include contacting some random non-respondents.

Second, the construct "effective" SIOs is problematic. Implicitly, we argue that there is a significant, positive relationship between detectives' opinions and actual effectiveness, since we only measured what detectives consider to be effective. Also, since effectiveness was not defined in the questionnaire, responding detectives might have emphasized very different interpretations of this construct. Future questionnaire designs should strive to solve such research design problems.

Effective SIOs as evaluated by their subordinates are characterized by being person oriented rather than case oriented. Important skills are motivational skills, communicative skills, listening skills, and organizational skills. According to this study, the least important for SIOs is investigation knowledge, when compared to investigative ability and management skills.

6.6. Organized Crime Economics

Home Office in the UK announced a new report on organized crime in 2007, but on the Internet http://www.homeoffice.gov.uk/rds/whatsnew1.html the following message was presented:

> The Online Report "Organized crime: revenues, economic and social costs, and criminal assets available for seizure" has been withdrawn.

Reversing decisions and secrecy is questionable, as knowledge workers always should know more information than that in a report. Knowledge is always ahead of its capture in documents. Police leadership is needed to fight organized crime. Development leadership has three characteristics: the leader acts as an exemplary model, shows individualized consideration, and demonstrates inspiration and motivation [61].

The economic side of organized crime is important, and it manifests itself in money laundering and other ways of spending proceeds from criminal activity. In Australia, Stamp and Walker [153] developed a conceptual picture of economic relationships as illustrated in Figure 6.5.

The costs of crime are part of the Australian economy. The proceeds of crime are a subset of the costs. Some of the proceeds of crime in Australia are laundered, but some laundered money also comes from outside the Australian economy. Terrorist finance may not have criminal origins and is
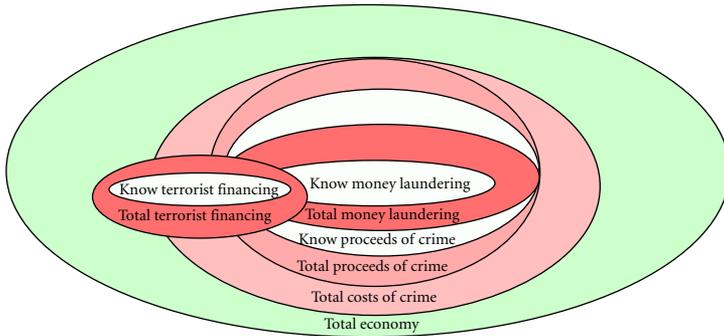
FIGURE 6.5. Conceptual model of the economic relationships between crime, money laundering, and terrorist financing (adapted from [153]).

not necessarily laundered. The "known" components are very small subsets of their respective estimated totals. The figure is not drawn to scale [153].

6.7. A Contingent Approach to Policing Organized Crime

In the following, we suggest that policing organized crime requires a contingent approach. The relative knowledge between police organizations and criminal organizations determines the optimal policing approach. Both police organizations and criminal organizations are defined as knowledge organizations, where the knowledge levels are core knowledge, advanced knowledge, and innovative knowledge in terms of know-what, know-how, and know-why. Based on the relative knowledge of criminals versus police, four sectors emerge: random policing, disadvantaged policing, targeted policing, and competitive policing.

The relative knowledge determines the competitive strength in knowledge businesses such as law firms, consulting firms, and other professional service firms. Similarly, we argue that the relative knowledge of criminals versus police determines the relevant law enforcement strategy when policing organized crime. Organized crime has attracted increased attention in recent years [266, 59, 125]. The purpose here is to introduce a contingent approach to policing organized crime, where the relative knowledge level is the contingency factor.

Criminal organizations are to increasing extent knowledge organizations as they develop over time. Similarly, police forces are increasingly knowledge organizations, as policing is more and more about preventing crime and solving complicated criminal cases.

A. Bennet and D. Bennet [101] define knowledge organizations as complex adaptive systems composed of a large number of self-organizing components that seek to maximize their own goals but operate according to rules in the context of relationships with other components. In an intelligent complex adaptive system the agents are people. The systems (organizations) are frequently composed of hierarchical levels of self-organizing agents (or knowledge workers), which can take the forms of teams, divisions or other structures that have common bonds. Thus while the components (knowledge workers) are self-organizing, they are not independent from the system they comprise (the professional organization).

Knowledge is often referred to as information combined with interpretation, reflection, and context. In cybernetics, knowledge is defined as a reducer of complexity or as a relation to predict and to select those actions that are necessary in establishing a competitive advantage for organizational survival. That is, knowledge is the capability to draw distinctions within a domain of actions [56]. According to the knowledge-based view of the organization, the uniqueness of an organization's knowledge plays a fundamental role in its sustained ability to perform and succeed [172].

According to the knowledge-based theory of the firm, knowledge is the main resource for a firm's competitive advantage. Knowledge is the primary driver of a firm's value. Performance differences across firms can be attributed to the variance in the firms' strategic knowledge. Strategic knowledge is characterized by being valuable, unique, rare, non-imitable, non-substitutable, non-transferable, combinable, and exploitable. Unlike other inert organizational resources, the application of existing knowledge has the potential to generate new knowledge [265].

Inherently, however, knowledge resides within individuals and, more specifically in the employees who create, recognise, archive, access, and apply knowledge in carrying out their tasks [70]. Consequently, the movement of knowledge across individual and organizational boundaries is dependent on employees' knowledge-sharing behaviors [66]. Bock et al. [146] found that extensive knowledge sharing within organizations still appears to be the exception rather than the rule.

The knowledge organization is very different from the bureaucratic organization. For example, the knowledge organization's focus on flexibility and customer response is very different from the bureaucracy's focus on organizational stability and the accuracy and repetitiveness of internal processes. In the knowledge organization, current practices emphasize using the ideas and capabilities of employees to improve decision-making and

organizational effectiveness. In contrast, bureaucracies utilize autocratic decision-making by senior leadership with unquestioned execution by the workforce [113].

In knowledge organizations, transformational and charismatic leadership is an influential mode of leadership that is associated with high levels of individual and organizational performance. Leadership effectiveness is critically contingent on, and often defined in terms of, leaders' ability to motivate followers toward collective goals or a collective mission or vision. [40].

If the police have more knowledge, crime will be fought in an efficient and effective way, and police will have success. If the police know less and the least compared to criminals, crime will have freedom to expand and succeed. Hence, it is not the absolute level of knowledge in police that is important but rather the relative knowledge level as illustrated in Figure 6.6 about knowledge war between the police and criminal organizations.

Distinctions can be made between core, advanced, and innovative knowledge. These knowledge categories indicate different levels of knowledge sophistication. Core knowledge is that minimum scope and level of knowledge required for daily operations, while advanced knowledge enables an organization to be competitively viable, and innovative knowledge is the knowledge that enables the organization to lead its industry and competitors.

- *Core knowledge* is the basic knowledge required to stay in business. This is the type of knowledge that can create efficiency barriers for entry of new companies, as new competitors are not up to speed in basic business processes. Since core knowledge is present at all existing competitors, the firm must have this knowledge even though it will provide the firm with no advantage that distinguishes it from its competitors. Core knowledge is that minimum scope and level of knowledge required just playing the game. Having that level of knowledge and capability will not assure the long-term competitive viability of the firm, but does present a basic industry knowledge barrier to entry. Core knowledge tends to be commonly held by members of an industry and therefore provides little advantage other than over non-members [186].

    In a law firm, examples of core knowledge include knowledge of the law, knowledge of the courts, knowledge of clients, and knowledge of procedures. For a student in the business school, core knowledge includes knowledge of what subjects to study this term and where the lectures take place. In a police organization, core knowledge includes

knowledge of policing tasks and procedures. In a criminal organization, core knowledge includes knowledge of relevant crimes and procedures.

According to Tiwana [166], core knowledge is the basic level of knowledge required just to play the game. This is the type of knowledge that creates a barrier for entry of new companies. Since this level of knowledge is expected of all competitors, you must have it even though it will provide your company with no advantage that distinguishes it from its competitors. Let us take two examples from the business world: One from the consumer electronics (hard product) business and one from Internet programming (soft product). To enter the modem manufacturing market, a new company must have extensive knowledge of these aspects: a suitable circuit design, all electronic parts that go into a modem, fabricating surface mount (SMD) chip boards, how to write operating system drivers for modems, and familiarity with computer telephony standards. Similarly, a company developing Websites for, say, florists, needs server hosting capabilities, Internet programming skills, graphic design skills, clearly identified target markets, and necessary software. In either case, just about any competitor in those businesses is assumed to have this knowledge in order to compete in their respective markets; such essential knowledge therefore provides no advantage over other market players.

- *Advanced knowledge* is what makes the organization competitively visible and active. Such knowledge allows the firm to differentiate its products and services from that of a competitor through the application of superior knowledge in certain areas. Such knowledge allows the firm to compete head on with its competitors in the same market and for the same set of customers. Advanced knowledge enables a firm to be competitively viable. The firm may have generally the same level, scope, or quality of knowledge as its competitors, although the specific knowledge content will often vary among competitors, enabling knowledge differentiation. Firms may choose to compete on knowledge head-on in the same strategic position, hoping to know more than a competitor. They instead may choose to compete for that position by differentiating their knowledge [186].

   In a law firm, examples of advanced knowledge include knowledge of law applications, knowledge of important court rulings, and knowledge of successful procedural case handling. For a student in the business school, advanced knowledge includes knowledge of important articles and books, which are compulsory literature in subjects this term. In police organizations, examples of advanced knowledge include

intelligence procedures and investigation techniques. In criminal organizations, examples of advanced knowledge include competitor intelligence and policing insights.

According to Tiwana [166], advanced knowledge is what makes your company competitively viable. Such knowledge allows your company to differentiate its product from that of a competitor, arguably, through the application of superior knowledge in certain areas. Such knowledge allows your company to compete head on with its competitors in the same market and for the same set of customers. In the case of a company trying to compete in modem manufacturing markets, superior or user-friendly software or an additional capability in modems (such as warning online users of incoming telephone calls) represents such knowledge. In case of a Website development firm, such knowledge might be about international flower markets and collaborative relationships in Dutch flower auctions that the company can use to improve Websites delivered to its customers.

- *Innovative knowledge* allows a firm to lead its entire industry to an extent that clearly differentiates it from competition. Such knowledge allows a firm to change the rules of the game by introducing new business practices. Such knowledge enables a firm to expand its market share by winning new customers and by increasing service levels to existing customers. Innovative knowledge is that knowledge that enables a firm to lead its industry and competitors and to significantly differentiate itself from its competitors. Innovative knowledge often enables a firm to change the rules of the game itself [186].

  In a law firm, examples of innovative knowledge include knowledge of standardizing repetitive legal cases, knowledge of successful settlements, and knowledge of modern information technology to track and store vast amounts of information from various sources. For a student in the business school, innovative knowledge includes knowledge of important topics within subjects, links between subjects, typical exam questions, and knowledge of business cases where theory can be applied. In police organizations, innovative knowledge includes intelligence within the centre of criminal organizations such as the Cosa Nostra, Hells Angels and Yakuza. In criminal organizations, innovative knowledge includes intelligence within the centre of customs agencies, police authorities, and municipalities.

  According to Tiwana [166], innovative knowledge allows a company to lead its entire industry to an extent that clearly differentiates it from competition. Innovative knowledge allows a company to change the rules of the game. Patented technology is an applicable example
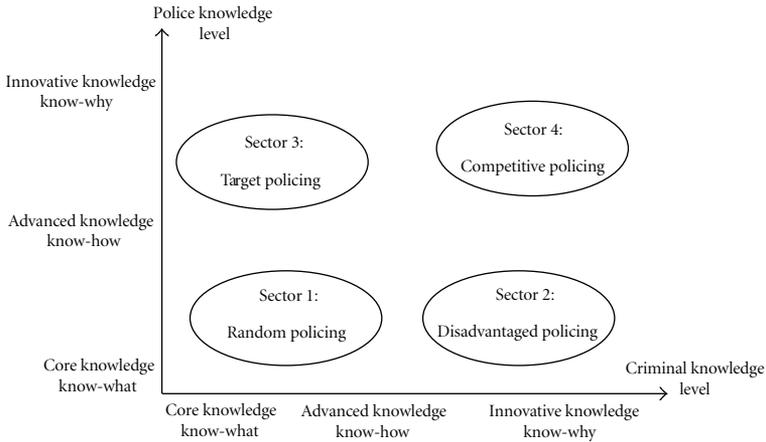
FIGURE 6.6. Knowledge War between the Police and Criminal Organizations.

of changing the rules. Patents cannot always protect innovative knowledge, as the lawsuit between Microsoft and Apple in the 1980s should serve to remind us. Apple sued Microsoft for copying the look and feel of its graphical user interface (GUI). The Supreme Court ruled that things like look and feel could not be patented; they can only be copyrighted. Microsoft won the case, since it copied the look and feel but used entirely different code to create it in the first place.

Knowledge levels were here defined as basic knowledge, advanced knowledge and innovative knowledge. An alternative is to define knowledge levels in terms of knowledge depth: know-what, know-how, and know-why respectively. These knowledge depth levels represent the extent of insight and understanding about a phenomenon. While know-what is a simple perception of what is going on, know-why is a complicated insight into cause-and-effect relationships about why things are going on:

- *Know-what* is knowledge about what is happening and what is going on. A police officer perceives that something is going on that might need his or her attention. The officer's insight is limited to perception of something happening. The officer does neither understand how it is happening nor why it is happening. Similarly, a criminal knows what to do, but he does know how to do it, nor why he is supposed to do it.

- *Know-how* is police knowledge about how a crime develops, how a criminal behaves, how investigation can be carried out or how a criminal business enterprise is organized. The officer's insight is not limited to a perception of something is happening; he or she also understands how it is happening or how it is. Similarly, criminal know-how is present when the criminal understands how crime is to be carried out and how criminal competitors and the police will react to the crime.
- *Know-why* is the knowledge representing the deepest form of understanding and insights into a phenomenon. The police officer and the police knowledge organization do not only know that it occurs and how it occurs. He or she also has developed an understanding of why it occurs or why it is like this. The criminal individual and the criminal organization do not only know what is going on and how it is occurring, as an understanding of causality is also present.

A key point of this research article is that the relative knowledge level of police should determine policing strategy when forcing law enforcement on criminal enterprises. Variations in relative knowledge level might be found between countries and regions, and it might be found between criminal industries.

For example, countries like Norway and Sweden may find themselves in sector 1 most of the time, mainly because of dumb criminals not requiring very knowledgeable police forces to be fought successfully. The UK may find itself in sector 4 most of the time, mainly because of the National Intelligence Model (NIM) and SOCA control actions required in law enforcement against national and transnational organized crime. Countries such as Italy and Pakistan may find themselves in sector 2 of disadvantaged policing, where the relative knowledge level is higher in criminal organizations than in police organizations. We do not suggest any country in sector 3, although that is certainly a sector to strive for in all countries.

Variations may be found between criminal industries as well. In Norway, trafficking of women and children may be found in sector 1, smuggling and handling of narcotics in sector 2, smuggling of alcohol in sector 3, and armed robbery in sector 4. In the UK, the situation may be quite different with armed robbery in sector 1, protection business in sector 2, drug trade in sector 3, and trafficking in sector 4. These examples are just ideas to illustrate the situations that may differ within nations and among nations.

In this first sector, both police and criminals suffer from lack of knowledge. Therefore, it becomes random who succeeds and who fails. Both criminal entrepreneurs and investigating police officers do only have basic

knowledge of crime business. The *core knowledge* may consist of some basic insights into distribution channels and market places. The knowledge is limited to *know-what,* where both sides know what is going on, but they do not know how it is going on, and they do not know why it is going on. Criminal entrepreneurs are not very sophisticated; they are typically opportunity-based without understanding how and why business performance does not improve. Similarly, police observes what is going on, but they do not understand how, and they certainly do not understand why. Also, police actions are only understood in terms of what is done in policing, as they do not know how their actions work and why some of their actions work while other actions do not work.

This situation causes randomness on both sides. Because they have so little knowledge, randomness occurs both among criminal entrepreneurs and police officers in their crime and law enforcement, respectively. Randomness is lack of order, purpose, cause and predictability.

In this sector 1, we suggest that the optimal law enforcement strategy has the following characteristics:

- *time frame:* some weeks up to some months;
- *goal:* imprisonment of non-important members of criminal organizations;
- *forecast:* chaotic, turbulent, and dynamic criminal environment;
- *change:* results in quantitative terms;
- *action:* short-term gain rather than long-term prevention;
- *resources:* division of labour based on need-to-know management;
- *analysis:* identifying criminals;
- *decision:* hierarchical organizational structure.

In this second sector, criminals are ahead of police. For example, criminal business enterprises may have knowledge of money laundering procedures and methods and knowledge of information and communication technology that are completely unfamiliar to law enforcement agencies.

In this sector 2, we suggest that the optimal law enforcement strategy has the following characteristics:

- *time frame:* some days up to some weeks;
- *goal:* imprisonment of individuals associated with criminal organizations;
- *forecast:* chaotic, turbulent, and dynamic criminal environment;
- *change:* results in quantitative terms;

- *action:* short-term gain rather than long-term prevention;
- *resources:* division of labour based on need-to-know management;
- *analysis:* identifying and solving crimes based on random policing opportunity;
- *decision:* hierarchical organizational structure.

In this third sector, police can be in charge of the situation and can prevent crime and solve crime, because they are ahead of criminals in terms of relative knowledge level. Police have a better understanding of security, psychology, technology, and other factors influencing organized crime.

In this sector 3, we suggest that the optimal law enforcement strategy has the following characteristics:

- *time frame:* some months up to some years;
- *goal:* closedown of criminal enterprises;
- *forecast:* predictable environment;
- *change:* results in society quality terms;
- *action:* focus on criminal organization rather than criminals;
- *resources:* knowledge management for knowledge sharing and knowledge development;
- *analysis:* business analysis of criminal enterprises;
- *decision:* knowledge organization structure.

In this fourth and final sector, both criminals and police officers work in knowledge organizations characterized by innovative knowledge. Criminal knowledge organizations are able to adapt quickly to new market conditions, law enforcement strategies, customs control procedures, and other factors influencing business performance. Similarly, police knowledge organizations understand criminal business enterprises in terms of their structures, markets, roles, and relationships.

In this sector 4, we suggest that the optimal law enforcement strategy has the following characteristics:

- *time frame:* from weeks to years;
- *goal:* limit criminal industries in terms of size in the legal economy;
- *forecast:* stable environment;
- *change:* results in quantitative terms;
- *action:* short-term gain combined with long-term borders for crime;
- *resources:* knowledge workers;
- *analysis:* identifying criminal businesses and their performance;
- *decision:* vertical knowledge-based decision-making.

The contingent approach to policing organized crime takes into account that policing strategy must be dependent on the relative position in the knowledge war with organized criminals. As such, this contingent approach has made a contribution to the emerging academic discipline of police science [30].

7

Knowledge Management in Policing MC Crime

A distinction must be made between non-criminalized and criminalized bikers. The latter outlaw bikers are typically motorcycle club members referring to themselves as "one-percenters." Among the criminal biker clubs we find Hells Angels, Outlaws, Bandidos, Pagans and Coffin Cheaters. The most well-known is Hells Angels Motorcycle Club (HAMC), which is in charge of many criminal business enterprises all over the world.

In this chapter, we will assume that Norwegian police establishes a national intelligence project to fight the criminal MC organizations such as Hells Angels Motorcycle Club in Norway.

7.1. The Case of Hells Angels Motorcycle Club

In the case of Criminal Intelligence Service Alberta's annual report in Canada, Hells Angels were gathering outside Calgary to celebrate the group's 10th anniversary in Alberta. Hells Angels were identified as being involved in the street-level drug trade. The worldwide biker gang arrived in Alberta ten years ago when it took over locally based independent gangs such as the Grim Reapers in Calgary. Despite that history and three chapters in Alberta—Calgary, Edmonton and a "Nomad" chapter based in Red Deer—Criminal Intelligence Service Alberta said that the gang had failed to make significant inroads in the province's criminal underworld [120].

"Without making light of their propensity for extreme violence—augmented by loyalty to the club's name—members of the Hells Angels continue to lack in criminal business savvy," the report said. "They have proven themselves to be an available source of "muscle" either for their own endeavors or for other criminal organizations. They are preoccupied

with the supremacy of their name within the criminal biker sub-culture" [120].

The Hells Angels' Calgary chapter has suffered some highly publicized setbacks, notably having to abandon a fortified clubhouse under construction in Bowness because it violated building codes. The chapter's then president, Ken Szczerba, was jailed in 2001 for trying to arrange a plot to bomb the homes of Ald. Dale Hodges and a community activist involved in getting construction halted. Nevertheless, police agencies underestimate the Hells Angels in this province at their peril, said the author of several books on the gang to Rassel and Komarnicki [120].

In the province of Quebec, the situation is very different. Police claim that Hells Angels control most of the organized crime in the province. This view is supported by criminologists who argue that the government is to blame for the situation. This is because of the policy of fighting the Mafia resulted in Hells Angels getting the opportunity to grow dominantly in the vacuum that emerged. Until then, Hells Angels were viewed as the street boys for the Mafia. In the years after 1994, wars between street gangs in the province have caused more than 100 killings (including a randomly passing person who was killed by a car bomb). More than 84 bomb attacks have occurred, 130 cases of fires, and 9 missing persons.

In Amsterdam in the Netherlands, Hells Angels are running much of the operations in the red light district. The motorcycle club owns restaurants and gambling casinos, and they run the prostitution and drug business. Since Hells Angels have full control of the situation, there is not much public crime in the district. Therefore, Dutch police seem satisfied with the situation, although they know it is wrong. Dutch police know that many of the major drug deals for Europe are settled in the red light district, where Hells Angels are in charge.

Also, spectacular killings are ulinked to Hells Angels MC Holland. For example, the Dutch lawyer Evert Hingst was murdered in front of his house in Amsterdam. Among Hingst's clients were many noted and alleged criminals, including John Mieremet, who was once shot in front of Hingst's office. After the assault, Mieremet claimed that Hingst had tried to set him up. Mieremet was murdered three days after the liquidation of Hingst. The lawyer Evert Hingst could be ulinked to Hells Angels MC Holland through John Mieremet and Willem Holleeder. Willem "The Nose" Holleeder is a Dutch criminal born in 1958 in Amsterdam. He was one of the perpetrators of the kidnapping of brewery president Heineken in 1983 [93].

Holleeder came in the news when the monthly magazine Quote printed a photo of Holleeder accompanied by Endstra. Endstra was regarded as the banker of the Dutch underworld. Endstra laundered drug money and

invested it in real estate. Holleeder ordered the extortion of Endstra in 2004 after Endstra started to give information to the Dutch national police. Hells Angels carried out the extortion, because Holleeder enjoyed significant influence in the criminal motorcycle club (http://www.wikipedia.org/).

When Dutch police was informed where to find the meeting room where criminal activities were planned, they installed listening devices and interception for communication control on the Hells Angels MC Holland premises. However, the police informant in the club was soon severely punished by the club, and meetings were moved to another HA resort.

When looking back at history, it all started in 1948 (http://www .wikipedia.org/):

> The Hells Angels club was formed in 1948 in Fontana, Calif, USA. The name "Hells Angels" was believed to have been inspired by the common historical use, in both World War I and II, to name squadrons or other fighting groups by fierce, death-defying names such as Hells Angels and Flying Tigers. The Howard Hughes film Hell's Angels was a major film of 1930 displaying extraordinary and dangerous feats of aviation. Several military units used the name Hells Angels prior to the founding of the motorcycle club of the same name. [. . .]

> The Hells Angels are shrouded in a cloud of mystery and controversy, thanks to a very strict code of secrecy and what can be construed as a practice of deliberate mythologizing by some members of the club. Members don't use last names, even with one another. They just use a first name, and, more often than not, a nickname. Due to its colorful history and the confirmed ulinks of some of its members to organized crime, speculation and rumor about the club's activities is rife.

It is assumed that HAMC has more than 2000 members and trial members (prospects) in 189 local departments (chapters) in 22 countries all over the world. HAMC was the symbol of an outlaw biker anti-culture in the 1960s. FBI estimates that Hells Angels make more than one billion US dollars a year on their global trafficking in drugs and women. This is denied by spokesmen of the club, who also argue that crimes committed by members are not the responsibility of the organization. Spokesmen of the club claim that they are only a motorcycle club, and that the majority of members are regular citizens who are misrepresented in the media. Nevertheless, HAMC presents itself as a 1% club, a phrase that was introduced

because the American Motorcyclist Association claimed that 99% of all MC drivers are regular citizens.

When analyzing Hells Angels motorcycle club, it should be understood as a criminal organization. As a criminal organization, it is both similar to and different from other organized crime groups. When policing street gangs based on ethnic backgrounds, it is sometimes compared to fighting local Hells Angels chapters. Nothing could be more wrong. While street gangs have to be understood in a context of temporary and dynamically changing relationships and finances, MC groups have to be understood as more permanent structures and finances. Understanding both similarities and differences between criminal business enterprises is critical in successful policing of organized crime. As illustrated in Figure 6.3, it would not be considered a success if a closed down HA chapter in one city is revitalized in another city.

Hells Angels have both the element of identity in Harley Davidson motorcycles, as well as in trafficking, drugs, extortions, money laundering, and other criminal activities. Hells Angels carried out the extortion of Endstra, because Holleeder enjoyed significant influence in the criminal motorcycle club.

In analyzing the culture of a particular group or organization, Schein [131] finds it desirable to distinguish three fundamental levels at which culture manifests itself: (a) observable artifacts, (b) values, and (c) basic underlying assumptions. When one enters an organization one observes and feels its artifacts. This category includes everything from the physical layout, the dress code, the manner in which people address each other, to the more permanent archival manifestations such as company records, products, statements of philosophy, and remains at crime scenes. These are all observable artifacts in the organization. A typical example is artifacts found on jackets and tattoos found on bodies such as A.F.F.A. (Angel. Forever. Forever. Angel.), which are manifestations of Hells Angels MC members.

Motorcycle clubs such as HAMC are fairly consistent in their modal organization, consisting of national, regional/state, and local tiers, which emerged after a formative period. Individual bikers, cliques, and chapters answer to the national leadership which controls their right to claim membership, but they also have sufficient autonomy to accommodate their extremely independent and rebellious personalities and wide ranging local circumstances [117].

This tension between intense loyalty and hierarchical control on the one hand, and autonomous masculinity on the other is perplexing to many outsiders. Loyalty to a singular national hierarchy reinforces deeply felt

tribal solidarity and power. Autonomy permits local flexibility in promoting growth and hegemony and avoids instigating rebellion among individuals. It also functions to make their actions difficult to directly ulink to the group's formal leadership and keeps the relationship between the club and the actions of its members distant from each other [117].

Values at the second level at Schein [131] can be studied in terms of norms, ideologies, charters, and philosophies. Strong values in Hells Angels MC (HAMC) include respect of other members. Basic underlying assumptions at the third and final level of organizational culture are concerned with perceptions, thought processes, feelings, and behavior.

While studies have shown that people within the same legal organization have very different values, often measured in terms of deviation from the mean, we might expect members of illegal organizations to have very similar values. Their values will not only be typical for criminal organizations, they will also have much smaller deviations between members than in criminal gangs and networks that are not so well established.

Criminal business organization is an enterprise where all people in all parts of the organization are involved in criminal activity. Hells Angels MC is a legal motorcycle club in most countries (not in Canada), where the members are involved in criminal activity based on emerging internal networks. For example, when a local Hells Angels MC organization runs a chain of legal tattoo shops, members are at the same time involved in drug smuggling, human trafficking and other criminal activities. Thus, the chairman and entrepreneur in Hells Angels MC Holland, Willem van Boxtel, need to express an overall strategy for the criminal business organization.

Hells Angels MC tends to have a matrix organization, where the legal motorcycle club is along the vertical axis, while the criminal activities of HAMC are along the horizontal axis. The criminal activities are not initiated and organized from the top. Instead, one core entrepreneurial member initiates a criminal project by identifying an opportunity and recruiting fellow members to the project. Top management is informed—but not necessarily involved.

Sometimes, HAMC gets into rivalry with similar clubs. For example, tough competition characterized MC organizations in Scandinavia a decade ago, where Bandidos, Hells Angels, and Outlaws were the main competitors. Among other business areas, they were competing in the amphetamine market. This competition was labeled "MC-war," as a variety of competitive weapons were used by the parties, including bombs.

One of the violent occasions in the history of HAMC occurred during a concert with Rolling Stones in Altamont (Calif, USA) in 1969. HAMC

members were hired in as guards for a compensation, which is claimed to include beer of a value of 500 US dollars. During the song "Under My Thumb" (and not "Sympathy for the Devil" as many believe), Alan Passaro knifed to death Meredith Hunter, who had drawn a gun. Passaro was later released because the murder was defined as self-defense. Both Hunter and Passaro were members of HAMC.

In the 1960-ies, during the Vietnam war, HAMC offered its services to American troops abroad. Although they were not allowed, this offer from HAMC was perceived as a traitor's act by all those who idolized the biker anti-culture. The critics of HAMC argued that the biker club tried to make an alliance with the US authorities. Six members of the John Brown Brethren group, a small but violent anti-war activist group, attacked HAMC in San Francisco and killed four members.

7.2. The Case of Criminal Motorcycle Clubs in Norway

In Norway we find three known criminal MC organizations—Hells Angels, Bandidos, and Outlaws—with different organizational structure and culture. Hells Angels seems to separate most systematically between the legal motorcycle club and criminal activity. The criminal HAMC activity is often based on private and personal initiative, where one member asks another member: "Would you like to take part in this?" Organized crime is then carried out by several HAMC members, but the criminal group is set up by initiative and contact directly among members. HAMC management is seldom directly involved. The organized crime is typically in areas such as narcotics, trafficking, and torpedo activities. If crime fails and members get prosecuted, then they may be expelled from HAMC as failures.

Let us start with the beginning of Hells Angels in Norway, which was founded in 1992 (http://www.hells-angels.com/):

> In August 1992 Norway got its first Hells Angels chapter, Hells Angels MC Trondheim .... In January 1995 the Club moved into a new clubhouse outside the city, the same as today.

While HAMC has recruited mainly MC interested men, Outlaws on the other hand has primarily recruited criminals as members. Therefore, there is a more visible ulink between motorcycle activities and criminal activities. Bandidos seems to be somewhere in the middle between Hells Angels and Outlaws. Some of the proceeds from organized crime in Norway is laundered and invested in Thailand by HAMC.

In the last decade, the number of criminal MC clubs has increased threefold in Norway. Hells Angels is still the largest, but is challenged by

Bandidos, Outlaws and also Coffin Cheaters is on its way [226]. In 1997, Bandidos and Hells Angels shared geographical areas and criminal markets among themselves. This mutual agreement was achieved after the bloody Scandinavian MC war that culminated with a bomb attack by Hells Angels on Bandidos head quarter in Drammen west of Oslo in Norway in 1997. Now this mutual understanding is challenged and threatened by new gangs over the whole country.

Leif Ivar Kristiansen is head of HAMC in Norway. He is located at the Hells Angels' headquarter in Trondheim, north of Oslo. He was interviewed in the Norwegian newspaper Adresseavisen [193] when a power fight was going on in the Hells Angels organization. Hells Angels MC Norway has chapters in Hamar, Stavanger, Skien, Oslo, Drammen, Tromsø, and Trondheim (http://www.hells-angels.no/). When Hells Angels decides to present themselves as clean from criminality such as bomb attacks, women trafficking, or cocaine smuggling, then typically a person from HA management without criminal record is presented.

Two thirds of all MC members in Hells Angels, Bandidos, and Outlaws have a criminal record in Norway. Some in management do as well. For example, Torkjel "The Rat" Alsaker was convicted to several years in prison because of shooting as well as participating in the bomb attack on Bandidos in Drammen in 1997. Leif Ivar Kristiansen, however, has no criminal record so far.

The headquarter building of HAMC Norway is at Trolla in Trondheim. The "chief executive officer" Leif Ivar Kristiansen has tried to become rich by establishing tattoo shops for money laundering. In 2001, he opened another outlet of his business chain called "Tattoo World" in the town of Lillehammer. According to Aftenposten [215], police considered Hells Angels established in Lillehammer by the presence of Kristiansen's Tattoo World.

In an interview when confronted with the question whether he was the president of Hells Angels MC Norway and hence top executive in Norway, Kristiansen replied in Aftenposten [215]: "I don't answer such questions. This is my secret. All my business activity occurs within my personal enterprise. It has nothing to do with HA. Such allegations build on stupidity, but it does not provoke me."

When Hells Angels MC Norway as an MC club is not directly involved in organized crime while being a criminal organization, individual members team up to carry out criminal projects. The relationship between criminal project and base organization is characterized by independence in terms of resource mobilization and management. Each criminal project enjoys freedom as long as it succeeds. Criminal projects requiring critical

resources in terms of innovative knowledge, large sums of money, and advanced technology are organized and run outside the base Hells Angels organization by participating criminal HA members moving temporarily out of chapter homes. Such criminal projects represent temporary organizations with their own goals, resources, and deadlines.

However, HAMC management decides the policy and rules to be followed both in the legal motorcycle club operations as well as in criminal activities. Global, European, Norwegian, and chapter management represent levels of authority reporting and taking orders. It is an obvious hierarchy. Global executives visit local management, and local management visits global executives. Informal communication among managers takes place during "motorcycle parties" where hundreds of executives and members from a number of countries may join to drink and talk at locations all over the world.

Similar to the situation in Canada, where Hells Angels expanded their criminal activities into areas where the Mafia had been active, because law enforcement was concerned with the Mafia, Norwegian police for a while ignored Hells Angels and other MC clubs to fight gangs that had established themselves in the capital Oslo. The gangs had shot each other at a well-known restaurant district, causing public attention and politicians' concern. High priority was put on policing Pakistani and other gangs, while Hells Angels, Bandidos and Outlaws could develop their criminal organizations without much police attention.

In Norway, HAMC and the others are perceived by the press, politicians, and public to be criminal clubs, although the clubs as such are not defined as criminal organizations. Canada seems still to be the only country that has officially labeled HAMC a criminal organization. Therefore, being a member in Canada is being a criminal, while this is not the case in Norway.

It seems that most criminal activities are carried out by new recruits among Hells Angels in Norway. They qualify for higher positions in the organization by successfully completing human trafficking, cocaine smuggling, debt collection, and money laundering.

It came as quite a surprise to many Norwegians in 2007, a surprise that indicates that Hells Angels MC Norway is still making progress in the country. In September that year, the earlier MC club Norsmen in the town of Øvre Eiker became full and complete members of HAMC. Hells Angels MC Drammen became the new name of Norsmen and became the seventh HA chapter in Norway. The mayor of Øvre Eiker, Anders B. Werp, expressed in an interview by NRK [96] that he very much disliked having HA in his town.

Shortly after, he received the following letter from the mayor in the city of Drammen that is next to the town of Øvre Eiker [14]:

THE THREAT FROM THE MC CLUBS ARE OF CONCERN TO THE WHOLE REGION

Open letter to the Mayor of Øvre Eiker, Anders B Werp.

In recent days, people in the Drammen Region did get confirmed what they all have feared, MC Norway Drammen has become full worthy member of Hells Angels.

Many, not at least Drammen people, do still remember the bomb in Konnerud street ten years ago very well. While it has been quite on the surface for some years now, the fact that Hells Angels establish themselves so strongly in our region now is of great concern to all of us.

An opportunity has lead to the establishment of Hells Angels in Øvre Eiker. But this does not imply that the challenge involved is only of concern to Øvre Eiker. The MC clubs are not restricted by municipality boarders. The criminality that we can assume these people bring with them, will also be felt in neighboring municipalities, not at least in Drammen as the regional center.

Therefore, it seems so important in law enforcement to prevent births of criminal organizations and pull all roots of established criminal organizations out of the earth.

Hells Angels MC Norway had chapters in Trondheim, Hamar, Oslo, Skien, Stavanger, and Drammen in 2008. Other MC clubs in Norway are Bandidos, Outlaws and also Coffin Cheaters.

The Bandidos Motorcycle Club was founded in 1966 in Tex, USA. The membership in this MC club is estimated to 2400 members in 14 countries. In Norway, Bandidos has approximately 40 members in five departments: Oslo, Fredrikstad, Drammen, Kristiansand, and Stavanger. Bandidos is involved in organized crime (http://www.wikipedia.org/):

In October 2006, George Wegers, then Bandidos' international president, pleaded guilty and received a two-year sentence for conspiracy to engage in racketeering. Also, in November 2006, Glenn Merrit of the Bellingham, Washington chapter was sentenced to four years in prison for drug possession and trafficking in stolen

property. A total of 32 members were indicted in the associated investigation, on charges including conspiracy, witness tampering, and various drug and gun violations. Eighteen of those plead guilty.

Outlaws was founded in McCook, (Ill, USA) in 1935. The club consists of 200 local clubs in USA, Canada, Australia, Asia, and Europe. In Norway, Outlaws has four departments in Oslo, Drammen, Fredrikstad and Romerike. Outlaws is involved in organized crime (http://www .wikipedia.org/):

- On June 10, 1997, US attorneys indicted 17 members of the Outlaws motorcycle club for racketeering, murder, narcotics trafficking, and bombing. Members were from Wisconsin, Illinois, and Indiana chapters. The Bureau of Alcohol, Tobacco and Firearms completed a two-year and a half investigation sparked by a war between the Outlaws and Hells Angels for control over areas of Chicago and Milwaukee.
- On December 19, 2000, Kevin O'Neill, president of the Wisconsin/Stateline Outlaws chapter, received a sentence of life in prison after being convicted oF racketeering charges.
- On May 31, 2001, Edward Anastas, one-time president of the Milwaukee chapter of the Outlaws motorcycle club, was arrested after being named in a sealed indictment charging him with racketeering conspiracy, cocaine conspiracy, and participating in a bombing.
- On March 14, 2003, Thomas Sienkowski, president of the Milwaukee chapter of the Outlaws motorcycle club, was sentenced to 10 years in prison for racketeering.
- On August 8, 2006, four Outlaws members were wounded, three seriously, in an ambush in Custer State Park, South Dakota among bikers gathered for the Sturgis Motorcycle Rally. A woman acquaintance was also wounded. Two men arrested and charged with attempted murder were said to be Canadian members of the Hells Angels. A statement posted on the Outlaws' web site had announced Outlaws members would attend Sturgis but not make any "display of power," and claimed that they had given prior notice to federal law enforcement of their intention to sightsee and enjoy the rally.
- Frank Rego Vital of Roberta (Ga, USA) an Outlaws MC member, was shot and killed in an early morning gunfight June 24, 2007, in the parking lot of The Crazy Horse Saloon strip club in Forest Park, Georgia by two members of the Renegades MC in what has been described as a self-defense shooting after Vital and other Outlaws members followed the

men from the club. Both Renegade members were shot several times but survived.

- On June 27, 2006, Christopher Legere of Raymond, New Hampshire, an Outlaws member, was arrested in the murder of a man who was wearing a Hells Angels shirt. The victim, John Denoncourt, 32 years old, of Manchester, New Hampshire, was shot and killed outside the 3-Cousins Pizza and Lounge in Manchester on Sunday June 25, 2006 after he was spotted hugging the bartender, who was Legere's girlfriend. Denoncourt, according to friends and family, was not a Hells Angel member himself but had friends who were. Legere had been involved in another incident in Connecticut in early 2006 when he was charged with illegal possession of body armor by a convicted felon, telling police that "tensions were high" between the Hells Angels and the Outlaws at the time and that members from outside of the state were brought in to protect Marty Warren, who claimed to be the East Coast representative for the Outlaws.
- On July 31, 2007, the FBI raided Brockton, Massachusetts outlaws. The Taunton, Massachusetts club house was raided, but due to immunity of the Brockton club house, nothing happened. Many people were arrested, including Joseph Noe, former Taunton chapter of the Outlaws.
- On the morning of August 16, 2007, Federal agents along with the Daytona Beach SWAT Team raided the Outlaws biker club's hangout on Beach Street in Daytona Beach, Fla, USA. Federal agents also raided a site in Ormond Beach and two others around the state. The search of the Jacksonville clubhouses netted federal agents 60 weapons. US Attorney General Alberto Gonzales announced a Detroit grand jury indictment of 16 of the Outlaws National Club's members. The Detroit grand jury indictment included various charges, including assault and drug distribution. Eleven Outlaws leaders and high-ranking members of the gang were arrested after a five-year investigation. The FBI said several gang members were charged with conspiracy to commit assault on members of the Hells Angels Motorcycle Club in Indiana.
- On March 5, 2008, fighting broke out at a motorcycle meeting in Germany, between Outlaws and Hells Angels members. Arrests were made.
- On March 10, 2008, a racial conflict broke out between the Outlaws and a group of African-American.
- On July 30, 2008, several facilities associated with the Outlaws in the Chicago area were raided by agents from the FBI and the ATF. The FBI brought in an SWAT team and an urban assault vehicle to the clubhouse in the west side of the city in case violence was to break out.

"Coffin Cheaters" originates from Australia, where there are ten departments with approximately 170 members. The members are involved in all kinds of criminality that generate income to the club and its members. Coffin Cheaters MC now has two full-worthy departments in Norway, one in Ringerike and the other in Stjørdal.

In Norway, an Outlaws member was shot and wounded in 1996. Six Hells Angels members were arrested, but charges were dismissed. Again in 1997, two Outlaws members were shot [204]. Then the list goes on chronologically as follows

- In 1987, members of the MC club, the Shabby Ones, were involved in a number of violent episodes.
- In June 1988, four Shabby Ones were accused of serious violence against a man. The crime occurred at a motorcycle gathering in Lyngdal. In August, three Shabby Ones were wanted after a violent episode at the cinema in Bryne. In September, narcotics and weapons were found in an apartment belonging to one of the members of The Shabby Ones.
- In 1989, two members of the Shabby Ones were arrested and suspected of drug smuggling. Two Shabby Ones were involved in insurance fraud.
- In 1991, the MC gang, the Shabby Ones from Sandnes, attacked Ålgård Motorcycle Club with bats.
- In 1992, Police had an action against the club localities of the Shabby Ones, weapons are confiscated and seven members arrested.
- In 1993, a member of MC club, the Shabby Ones, was put on trial because of violence against policeman causing serious injuries.
- In February 1995, shooting between members of the Rabies MC (now Bandidos) and Customizers (now HA) in Oslo. Rabies MC members in a car were shot at. In August, five persons were arrested after illegal import of 25 kilos of hashish from Denmark to Norway. Two of the arrested were members of an MC club. In October, a member of the Hells Angels club at Braut was arrested. The police found narcotics and weapons. In December, a man from HA, Braut, was caught by police in Trondheim, with weapons, illegal spirits and amphetamine. Also in December, shots were fired against a member of the Bronx-95 (Bandidos); three HA members prosecuted, but released.
- In January 1996, two members of Back Guard MC W. Seaside were jailed for illegal import of a kilo amphetamine to Norway. Also in January, Outlaws member was shot and wounded. Ten HA members were released after trial. In February, police found weapons in the clubhouse of Black Guard MC W. Seaside at Lomeland in Gjesdal. In March,

Bandidos member was shot and wounded at Oslo Airport. HAMC was suspected of attempted murder. In May, two women in a car outside HA premises were shot and one was hurt. In July, a Danish Bandidos member was shot and killed by Newcastle United in Bangkok. A Hells Angels member was imprisoned. In November, police found weapons, narcotics, user equipment, and stolen goods in the club house of Hells Angels at Braut. In December, seven members of HA at Braut are arrested for using drugs.

- In June 1997, two persons in the HA club at Braut were arrested by police. One of them was jailed for possession of narcotics. Also in June, a woman was killed when a powerful bomb explodes in the Bandidos headquarters in Bangkok. In November, police took an action against Black Guard MC W. Seaside. The catch consisted of weapons and narcotics. Two men in the criminal MC milieu were jailed after drug seizure.

- In January 1998, a member of the MC club Hogs Riders in Stavanger was jailed. He was indicted in connection with 11 kilograms of amphetamine seized in Oslo in December 1996. In July, after a police action against the Hells Angels in Braut, seven people reported use of drugs.

- In 2000, four people ulinked to Bandidos were arrested and indicted in a serious violence case in Østfold.

The Norwegian departments are closely ulinked to international operations. All over the world, these criminal biker clubs make money on narcotics traffic, human smuggling, prostitution, debt collection, and violence tasks. The MC gangs are dependent on personal contacts across borders. At international gatherings and parties, organized crimes are agreed and planned, and international executives from theUSA and Europe give their orders to each chapter or department. MC gatherings for these gangs are more than drinking and fun. Gang members have secret meetings in hotel rooms, camping wagons and bars. An example is the international party held in the city of Kristians and in Norway by Bandidos in 2007. Swedes came by ferry from Strømstad to Sandefjord, while groups of fifteen members arrived by plane from the continent at Kjevik airport outside Kristiansand, and some came by ferry from Hirtshals in Denmark. A total of 200 guests took part in the Bandidos feast in Kristians.

Prison guards in Norwegian prisons are afraid of inmates from criminal motorcycle clubs. One guard expressed his concerns like this as follows [222]:

Every time we get in someone from HA and Bandidos, it takes only two minutes and then they have control over all the prisoners in the section. They always have some assistants who do the work for them so that we never get a case against them, and they can follow regular progression as prisoners without red tags, while they in reality regulate all activities among prisoners. They recruit new ones that they can use when they get out, for various criminal activities. Prisoners do of course not want to get in conflict with these inmates, as it can have consequences for them when they get out, and it is always useful to get a bit of protection both inside and outside, and therefore they take on the role of assistants. This is a problem, and it becomes bigger and bigger.

There are many theories about MC crime, but few empirical studies. One theory is the matrix theory, which claims that criminal projects are organized horizontally while the motorcycle club is managed vertically. This would imply that Hells Angels MC, for example, is a matrix organization. A member initiates a criminal project by involving other members (colleagues) in the same club; this is a horizontal initiative. Management is not necessarily involved. The legal part of the motorcycle club is run by the vertical axis, while the criminal part of the motorcycle club is run by the horizontal axis in the matrix. This theory seems to find support in the MC crime practice in Norway.

Another theory is the newcomer theory, which implies that newcomers need to make themselves deserve membership in the MC club through successful crime. These freshmen need to convince MC club management that they are competent in carrying out criminal activities such as drug smuggling of and debt collection. Based on successful completion of organized crimes, newcomers expect to be enrolled in the MC club. This theory seems as well to find support in MC crime practice in Norway.

Swedish police did recently carry out an intelligence-led action against Bandidos based on the newcomer theory. It was a coordinated action at ten locations in Sweden. A total of 13 persons were arrested among Bandidos members. The arrests were a result of cooperation between several government authorities. The background was intelligence and analysis carried out by Skåne police district and national criminal police in Sweden 's national task force against MC groups [127]:

Bandidos has a strictly hierarchical structure while Hells Angels has a flat organization similar to a franchising business. Deepest down in the pyramid are the criminals that apply for membership. To

qualify, they must carry out crimes and several specific activities such as cleaning, shopping, guarding chauffeuring, etc. The benefit is protection and the prospect of future climbing in ranks. Already before membership is actually achieved, prospect persons have normally become regular criminals in organized crimes.

The suspicions against those 13 Bandidos members were specifically about organized transfer of illegal labor and tax withdrawal amounting to 15 million Swedish crooners (6 million US dollars). The general impression at the National criminal police in Sweden is that MC gangs are active in most or all crime areas where there is money. The leaders are a special brand of entrepreneurs who consider the laws in society as not valid neither for themselves nor for their business activities.

There are a number of more general theories that might be applied to explain aspects of organized crime: (1) theory of criminal market forces—cartel theory, (2) theory of unstable governments—regime theory, (3) theory of rivalry—competition theory, (4) theory of dominance—monopoly theory, (5) theory of external threats—conspiracy theory, (6) theory of rational choice—decision theory, (7) theory of fear—violence theory, (8) theory of market mechanisms—market theory, (9) theory of psychological deviance—behavioral theory, (10) theory of competence—learning theories, (11) theory of social environments—environment theory, (12) theory of deviant subcultures—subculture theory, (13) theory of decentralization—organizational theory, (14) theory of social control—control theory, (15) theory of prisoner's dilemma—game theory, (16) theory of entrepreneurship—innovation theory.

7.3. Knowledge Matrix in Policing MC Crime

Police in Canada have put substantial efforts recently into fighting criminal MC clubs. For several years, they have used expert witnesses in cases related to MC crime. Expert witnesses are neutral experts who are able to explain how these clubs and their members work in terms of, for example, signs and signals used by debt collection, where threats of violence are common. These expert witnesses are independent of police intelligence and police investigations, and they explain in court the structure and culture in various MC clubs such as HA, Bandidos, and Outlaws.

Norwegian police have very limited knowledge of MC related crime. The limited knowledge available to the Norwegian police force is spread in many national police agencies and local police districts. We therefore assume that there is a need to develop knowledge in the police force about

criminal motorcycle clubs in Norway. We further assume that there will be a new department to be established in the National Criminal Police Center (Kriminalpolitisentralen, Kripos) for intelligence and analysis in the country. We might label the new department the MC Crime Department (MCCD) within Kripos. MCCD's ultimate goal is to eliminate criminal MC clubs in Norway within the year 2030 in cooperation with local police districts, national police agencies, and international police organizations such as Europol and Interpol. We assume that MCCD will have 10 knowledge workers, among them are 5 police officers, 3 data technologists, and 2 lawyers. Police officers are intelligence and investigation experts, data technologists are computer experts, with lawyers and legal experts. One of the police officers will head the department. It is assumed that the department will be in operation next year. The department's role is to contribute to more knowledge about MC crime and criminals in Norway.

The purpose of the remaining chapter is to illustrate potential preparations that need to be completed before establishing this thought department in terms of knowledge needs, information systems, work process, work dynamics, and causal relationships.

A knowledge matrix is a table that lists knowledge needs. The matrix shows knowledge categories and knowledge levels. Here we make distinctions between the following knowledge categories for policing MC crime.

(1) *Administrative knowledge* is the knowledge about police as an organization and work place. It is knowledge about procedures, rules and regulations.

(2) *Policing knowledge* is knowledge about work processes, and practices in police work when fighting crime. Police knowledge is based on police science, which includes all aspects of policing internally as well as externally. It includes external factors that influence the role and behavior of police in society.

(3) *Investigative knowledge* is the knowledge based on case specific and case oriented collection of information to confirm or disconfirm whether an act or no-act is criminal. Case documents and evidence are included here in such a form that they prove useful in a court case.

(4) *Intelligence knowledge* is knowledge based on a systematic collection of information concerned with a certain topic, a certain domain, certain persons or any other focused scope. Collected information is transformed and processed according to a transparent methodology to discover criminal capacity, dispositions, and goals. Transformation and processing generate new insights into criminality that guide the effectiveness and efficiency of policing. phenomenological knowledge

is included in intelligence knowledge, which is defined as knowledge about a phenomenon, in terms of what it is about (know-what), how it works (know-how), and why it works (know-why). Phenomenological knowledge enables intelligence officer to "see" what "something" is about, by understanding and not missing when information emerges.

(5) *Legal knowledge* is knowledge of the law, regulations, and legal procedures. It is based on access to a variety of legal sources both nationally and internationally, including court decisions. Legal knowledge is composed of declarative, procedural, and analytical knowledge. Declarative knowledge is law and other regulations. Procedural knowledge is the practice of law. Analytical knowledge is the ulink between case information and laws.

(6) *Technological knowledge* is knowledge about the development, use, exploitation, and exploration of information and communication technology. It is knowledge about applications, systems, networks and databases.

(7) *Analytical knowledge* is knowledge about the strategies, tactics, and actions that police can implement to reach desired goals.

In addition to this classification into knowledge categories, we also make distinction between knowledge levels.

(1) *Basic knowledge* is knowledge necessary to get work done. Basic knowledge is required for an intelligence officer as a knowledge worker to understand and interpret information, and basic knowledge is required for an intelligence unit as a knowledge organization to receive input and produce output. However, basic knowledge alone produces only elementary and basic results of little value and low quality.

(2) *Advanced knowledge* is knowledge necessary to get good work done. Advanced knowledge is required for an intelligence officer as a knowledge worker to achieve satisfactory work performance, and advanced knowledge is required for an intelligence unit as a knowledge organization to produce intelligence reports and crime analysis that is useful in policing. When advanced knowledge is combined with basic knowledge, then we find professional knowledge workers and professional knowledge organizations in law enforcement.

(3) *Innovative knowledge* is knowledge that makes a real difference. When intelligence officers apply innovative knowledge in intelligence and analysis of incoming and available information, then new insights are

	Basic knowledge	Advanced knowledge	Innovative knowledge
Administrative knowledge			
Policing knowledge			
Investigative knowledge			
Intelligence knowledge			
Legal knowledge			
Technological knowledge			
Analytical knowledge			

FIGURE 7.1. Knowledge matrix for knowledge needs in policing criminal business enterprises.

generated in terms of crime patterns, criminal profiles and policing strategies. When intelligence units apply innovative knowledge, then new methodologies in intelligence and analysis are introduced, that other parts of police can learn.

Based on these categories and levels, our knowledge matrix consists of 7 knowledge categories and 3 knowledge levels as illustrated in Figure 7.1. The purpose of the figure is to illustrate that there are a total of 21 knowledge needs in policing criminal business enterprises. Based on Figure 7.1, each intelligence unit has to identify and fill in the figure for knowledge needs.

Knowledge levels were here defined at basic knowledge, advanced knowledge, and innovative knowledge. An alternative is to define knowledge levels in terms of knowledge depth: know-what, know-how, and know-why. These knowledge depth levels represent the extent of insight and understanding about a phenomenon. While know-what is simple perception of what is going on, know-why is a complicated insight into cause-and-effect relationships why it is going on.

	Know-what	Know-how	Know-why
Administrative knowledge			
Policing knowledge			
Investigative knowledge			
Intelligence knowledge			
Legal knowledge			
Technological knowledge			
Analytical knowledge			

Figure 7.2. Alternative knowledge matrix for knowledge needs in policing criminal business enterprises.

(1) *Know-what* is knowledge about what is happening and what is going on. A police officer perceives that something is going on, that might need his or her attention. The officer's insight is limited to perception of something happening. The officer neither understands how it is happening nor why it is happening.

(2) *Know-how* is knowledge about how a crime develops, how a criminal behaves or how a criminal business enterprise is organized. The officer's insight is not limited to a perception of something that is happening; he or she also understands what it is happening or how it is.

(3) *Know-why* is the knowledge representing the deepest form of understanding and insight into a phenomenon. The officer not only knows that it occurs but also how it occurs. He or she also has developed an understanding of why it occurs or why it is like this.

When HAMC is organized in a different way than Bandidos, an officer at the know-what level only knows that they are different. An officer at the know-how level knows how they are different, for
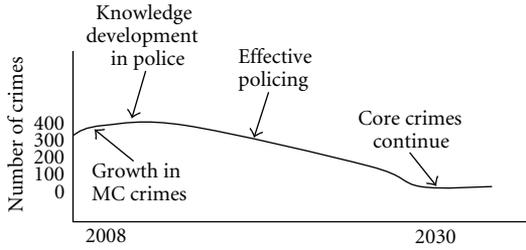
FIGURE 7.3. Possible development in crimes by criminal MC clubs.
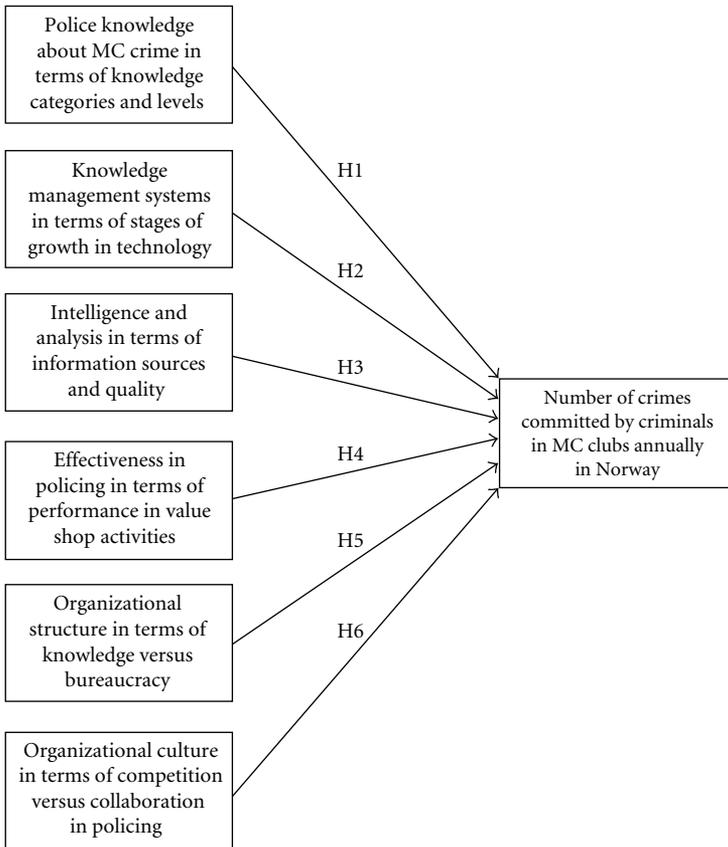
FIGURE 7.4. Research model explaining variation in number of crimes.

example in terms of recruiting new bikers with criminal experi-
ence. An officer at the know-why level knows why Bandidos has a

stronger tendency than Hells Angels to recruit bikers with criminal experience.

Based on these depth levels, our alternative knowledge matrix consists of 7 knowledge categories and 3 knowledge depth levels as illustrated in Figure 7.2. Again the purpose of the figure is to illustrate that there are a total of 21 knowledge needs in policing criminal business enterprises. Based on the figure, each intelligence unit has to identify and fill in the table shown in Figure 7.2 for knowledge needs.

7.4. Research Model for Policing MC Crime

We assume that the ambition and goal in Norway are to reduce MC crime and ultimately eliminate criminal motorcycle clubs. This is illustrated in Figure 7.3, where a time perspective is introduced. Starting in 2008, we assume that Norwegian will have to spend some years to develop knowledge. Then, more effective police can take place, thereby reducing the number of crimes. Ultimately in 2030, there might still be a core of crimes that still exist.

The reason for this positive projection into the future has to be found in causal relationships if the projection is to be trustworthy. In the research model in Figure 7.4, some potential causal relationships are illustrated. The dependent variable in the model is the number of crimes committed by criminals in MC clubs annually in Norway.

The next step in a research process is to formulate research hypotheses for each of the ulinks in the research model. These hypotheses are labeled H1 to H6 in the research model. However, in this book it is not appropriate to move beyond the stage of a research model in our presentation of policing criminal business organizations.

8 Stage Model for Online Grooming Offenders

An important task after information has been processed through intelligence and analysis is theory development. New insights are systematized and framed into theories about criminals and crimes. In this chapter we will exemplify such theory building in the area of online grooming and victimization of children. The theory proposed in this chapter is a growth stage theory for online grooming offenders.

Stages of growth models have been applied to a variety of phenomenon to determine direction of escalation in behavior and performance. In this chapter, we suggest a stage model for online grooming offenders to gain new insights into online victimization of children, which is concerned with sexual abuse caused with the help of online technologies. The stages in our model are labelled online consumer, online communicator, online organizer, and online producer, respectively. At stage 4 of online producer, the offender typically publishes images from his abuse of children.

8.1. Online Victimization of Children

"I am Stian 15" said the Norwegian man on the Internet and made young girls take off their clothes in front of their web cameras at home. He had sex with two girls and made sixty girls aged 10–16 strip in front of their cameras. In 2008, the man (33) was sentenced to four years in prison in Norway. The same year, pictures of child abuse in Asia by a Canadian were found on a PC in Norway. Interpol in Lyon in France were informed by Norwegian police. While raping boys younger than 10, the Canadian had taken and later distributed pictures of himself and the boys [97].

Offenders seek to create an environment in which the opportunities to sexual assault children are present. Adults who use their relationships with children to facilitate and disguise their sexually abusive behavior

towards children present a considerable dilemma for our society [160]. The dilemma is the difficulty in identifying adults who intend to use their contact with children to create opportunities to sexually abuse. According to Sullivan and Beech [160], the vast majority of convicted sexual offenders are male, but there are also female offenders of children.

Online victimization has been a serious problem for many years. Children and young people are active users of online technologies, and have in many instances more expertise and experience in the use of information technology than their parents, teachers, or other adults. However, as a consequence of the possibilities that lie within the services offered online, like social network services, their own behavior and the behavior of people with a sexual interest in children in terms of harmful conduct, they are vulnerable and may become victims of sexual abuse. How many children are targeted or become victims in the online environment and the dynamics of children's own behavior and that of the perpetrators is only known to a certain extent [246].

Risks for and negative impacts on children online can result from being exposed to illegal content, harmful conduct, and harmful content [246].

- *Illegal content* is defined by national law. Illegal content is primarily dealt with by law enforcement agencies, prosecuting offenders and bringing them to trial. The main type of illegal content, which falls under our scope, is child abuse material.
- *Harmful conduct* includes conduct preparatory to committing a sexual offence against a child by contacting them online (grooming) and harassment happening in the online environment (cyber-bullying). The preparatory acts for committing sexual offences are not, as such, yet considered as an offence in most European countries, but grooming is a criminal offence in the UK and in an increasing number of other countries.
- *Harmful content* is content, which parents, caretakers, teachers and other adults responsible for children consider to be harmful for them. The conception of what is harmful also varies across countries and cultures. A variety of means exist to deal with harmful content, such as enforcement of legal provisions where they exist.

This chapter represents a knowledge enhancement effort in law enforcement. According to the European Commission [246], knowledge enhancement projects are important projects within the general field of safer Internet and online technologies in electronic government. The aim of such projects is to strengthen the knowledge base relevant to the policing

work, law enforcement work, and government work in general. Specifically, our project aims to enhance the knowledge of online-related sexual abuse and victimization, in particular online grooming. Grooming is the process by which a person befriends a child with the intention of committing sexual abuse.

8.2. Stages of Growth Models

Stages of growth models have been used widely in both organizational research and management research. According to King and Teo [51], these models describe a wide variety of phenomena—the organizational life cycle, product life cycle, biological growth, etc. These models assume that predictable patterns (conceptualized in terms of stages) exist in the growth of organizations, the sales levels of products, and the growth of living organisms. These stages (i) are sequential in nature, (ii) occur as a hierarchical progression that is not easily reversed, and (iii) evolve a broad range of organizational activities and structures.

Benchmark variables are often used to indicate characteristics in each stage of growth. A one-dimensional continuum is established for each benchmark variable. The measurement of benchmark variables can be carried out using Guttman scales [261]. Guttman scaling is a cumulative scaling technique based on ordering theory that suggests a linear relationship between the elements of a domain and the items on a test.

Various multistage models have been proposed for organizational evolution over time. For example, Nolan [94] introduced a model with six stages for information technology maturity in organizations, which later was expanded to nine stages. Earl [238] suggested a stage of growth model for evolving the e-business, consisting of the following six stages: external communication, internal communication, e-commerce, e-business, e-enterprise, and transformation, while Rao and Metts [119] describe a stage model for electronic commerce development in small- and medium-sized enterprises. In the area of knowledge management, Housel and Bell [23] developed a five level model. In the area of knowledge management systems, Gottschalk [3] developed a four-stage model applied to knowledge management in law enforcement. Gottschalk and Tolloczko [6] developed a maturity model for mapping crime in law enforcement, while Gottschalk and Solli-Sæther [5] developed a maturity model for IT outsourcing relationships. Each of these models identifies certain characteristics that typify firms in different stages of growth. Among these multistage models, models with four stages seem to have been proposed and tested most frequently.

A recent example is a stage of growth model for corrupt organizations, where the four-stage model proposed by Pfarrer et al. [106] is concerned with organizational actions that potentially increase the speed and likelihood that an organization will restore its legitimacy with stakeholders following a transgression. The four stages are labeled discovery, explanation, penance, and rehabilitation, respectively.

The concept of stages of growth has been widely employed for many years. Two decades ago, Kazanjian and Drazin [43] have already found that a number of multistage models have been proposed, which assumes that predictable patterns exist in the growth of organizations, and that these patterns unfold as discrete time periods best thought of as stages. These models have different distinguishing characteristics. Stages can be driven by the search for new growth opportunities or as a response to internal crises. Some models suggest that organizations progress through stages while others argue that there may be multiple paths through the stages. Kazanjian [42] applied dominant problems to stages of growth. Dominant problems imply that there is a pattern of primary concerns that firms face for each theorized stage. In criminal organizations, for example, dominant problems can shift from lack of skills to lack of resources to lack of strategy associated with different stages of growth. Kazanjian and Drazin [43] argue that, either implicitly or explicitly, stages of growth models share a common underlying logic. Organizations undergo transformations in their design characteristics, which enable them to face the new tasks or problems that growth elicits. The problems, tasks, or environments may differ from model to model, but almost all suggest that stages emerge in a well-defined sequence, so that the solution of one set of problems or tasks leads to the emergence of a new set of problems and tasks, that the organization must address.

8.3. Online Grooming Offence

In the UK, the sexual offences act clarifies the position with regard to sexual abuse of children, outlining several distinct offence categories [227]:

- rape and other sexual offences against children under 13 years;
- child sex offences (which includes the new offence of "meeting a child following sexual grooming");
- abuse of position of trust;
- familial child sex offences;
- indecent photographs of children;
- abuse of children through prostitution and pornography.

Meeting a child following sexual grooming applies to the Internet, other technologies such as mobile phones, and as well to the real world. Grooming involves a process of socialization during which an offender seeks to interact with a child (and sometimes the child's family), possibly sharing their hobbies, interests and computer slang in an attempt to gain trust in order to prepare them for sexual abuse. The process may also involve an attempt to persuade a child that sexual relations between adults and children are acceptable.

Sex offenders use the Internet to target and groom children for the purposes of sexual abuse, to produce and/or download indecent illegal images of children for distribution, and to communicate with other sex offenders. Internet sex offender behavior includes the following [225]:

- construction of sites to be used for the exchange of offender and victim information;
- experiences and indecent images of children;
- organization of criminal activities that seek to use children for prostitution purposes;
- oroduction of indecent images of children at a professional level;
- organization of criminal activities that promote sexual tourism.

The demand for indecent images through, for example, the use of file-sharing technologies, has expanded so much that law enforcement agencies are finding it difficult to identify and track down all child victims and the perpetrators involved. Possible motivations of online child sex abusers are many. It is suggested that sex offenders perceive the Internet as a means of generating an immediate solution to their fantasies. Factors including presumed anonymity, interactivity and ready accessibility might encourage offenders to go online. The unique structure of the Internet may play a major role in facilitating online child abuse. Offenders' Internet use is not limited to abuse; the Internet often plays a significant role in other areas of their lives.

Typologies of Internet child sex offenders have been developed to guide the work of police officers. One typology does include those offenders targeting and grooming children online, a group largely excluded from other typologies. For example, nine categories of offenders might be identified [227]: (i) the browser is an offender who accidentally comes across indecent images and save them, (ii) the dreamer applies fantasy to digital image, (iii) the networker is an offender engaging in exchange with others, (iv) the collector looks for indecent images in open search to update his collection, (v) the member belongs to an online, hidden paedophile network, (vi) the

connector targets children via peer-to-peer technology and chat rooms, (vii) the abuser enjoy images of their own abuse, (viii) the producer records sexual abuse of children, while (ix) the distributor is an offender who distributes indecent images for financial gain or as part of their collecting behavior.

The definition of grooming in the UK legislation is as follows [227]:

- The offence only applies to adults.
- There must be communication (a meeting or any other form of communication) on at least two previous occasions. It is not necessary for the communications to be of a sexual nature.
- The communication can take place anywhere in the world.
- The offender must either meet the child or travel to the prearranged meeting.
- The meeting or at least part of the travel must take place within the jurisdiction.
- The person must have an intention to commit any offence under the sexual offences act or any act, which would be an offence in the jurisdiction. This may be evident from the previous communications or other circumstances, for example, an offender travels in possession of ropes, condoms or lubricants, etc.
- The child is under 16 and the adult does not reasonably believe that the child is over 16. However, if this is not the case, for example, the child's place has been taken by an undercover police officer, an attempt could be charged.

In sentencing under the sexual grooming category, judges are advised to consider the following aggravating case circumstances [227]:

- the seriousness of the intended offence (which will affect both the offender's culpability and the degree of risk to which the victim has been exposed);
- the degree to which the offence was planned;
- the sophistication of the grooming;
- the determination of the offender;
- how close the offender came to success;
- the reason why the offender did not succeed, that is, was it a change of mind or did someone or something prevent the offender from continuing?
- any physical or psychological injury suffered by the victim.
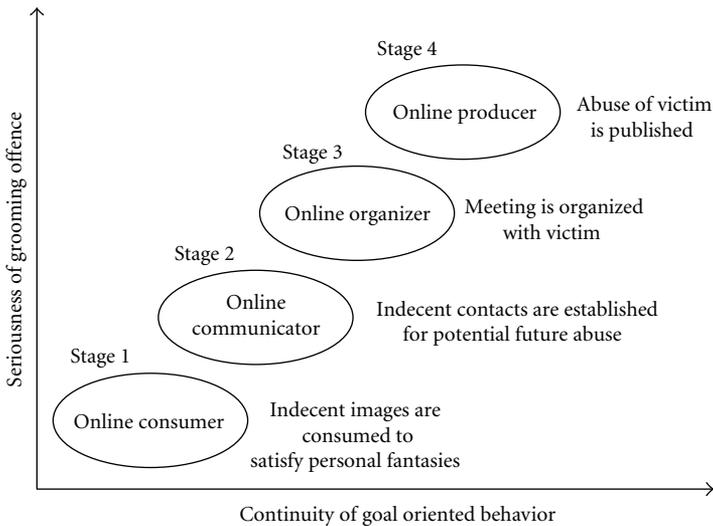
FIGURE 8.1. Stages of online grooming.

8.4. Stages of Online Grooming Offenders

While most stages of growth models are concerned with the organizational level, this research is concerned with the individual level. In the following, we propose a stage of growth model for online grooming offenders. Our model represents a stage hypothesis for offenders. The idea of stages of growth is that it might be assumed that the offender starts at stage 1 and over time develops into higher and more serious stages. This assumes that an offender found to be at stage 4 some years ago was at a lower stage.

The stages in the stage model for online grooming offenders are as follows (see also Figure 8.1):

- *Stage 1: Online Consumer.* This person may start as a browser, who accidentally comes across indecent images and save them. After a while, such images are purchased via credit card. Indecent images are used to satisfy private fantasies. Digital images are consumed for personal use. As a consumer, the paedophile is mainly concerned with combining image impression and personal fantasy to achieve personal satisfaction. Consumption of indecent images of children on the Internet is the main activity of the abuser. In some cases, the person has experienced prior contact abuse.

According to Davidson [225], sex offenders use the Internet to access indecent images of children, to select victims for abuse and to communicate with other sex offenders. This activity has expanded so much that law enforcement agencies have difficulties tracking down child victims and perpetrators involved.

According to Kierkegaard [50], every second about thirty thousand Internet users are viewing pornography. Internet is aiding sexual predators, stalkers, child pornographers, child traffickers, and others with the intent of exploiting children.

- *Stage 2: Online Communicator*. This person searches indecent images through open browsers and may engage in some networking. Also, this person looks for indecent images in open areas of the Internet such as chat rooms and may engage in some networking. As a communicator, the person might communicate with other paedophiles and/or potential victims. For example, the person may both exchange and trade in indecent images with men having the same interest. Here we find collection of certain images (same victim age and same level of seriousness).

According to Kierkegaard [50], Internet bulletin boards, chat rooms, private websites, and peer-to-peer networks are being used daily by paedophiles to meet unsuspected children. Teenagers are especially vulnerable because they are often trusting, naive, curious, adventuresome, and eager for attention and affection.

Online sex offences and online contacts leading to offline sex offences against children in Sweden were studied by Brå [197]. In a school survey of a representative Swedish sample aged 15, 31 percent reported online sexual contact from someone they "know or believe is an adult" over past 12 months (46% of girls, 16% of boys).

- *Stage 3: Online Organizer*. Either the person uses peer-to-peer technology, interactive Internet games and chat rooms to organize meetings. The person is grooming online for the purposes of abuse or does not, he remains indecent image user. If a meeting is organized, personal sexual abuse of child or children is the goal. Here we find online or possibly that abuse is ongoing with family children or other children known to offender.

According to Wolak et al. [181], most Internet-initiated sex crimes involve adult men who use the Internet to meet and seduce underage adolescents into sexual encounters. The offenders use Internet communications such as instant messages, e-mail, and chat rooms to organize meetings and develop intimate relationships with victims.

"Stian 15" is one of the few offenders caught in Norway in recent years. 22 percent of all Norwegian children between 9 and 16 years old (about 70 000 children) have met someone on the Internet. Most of these meetings were with persons of their own age and occurred without any problems. However, in some cases the children meet adults that claimed to be children on the Internet. Only 10 percent of those children who have gone to such meetings report that they experienced anything unpleasant in terms of words or physical abuse. It is mostly girls of 15–16 years who have unpleasant experiences. Most of those children who have unpleasant experiences in terms of physical or psychological abuse at such meetings with adults report that they are dissatisfied with friends, school and/or own family. Most of them have parents born in another country than Norway. A total of 6000 children age 9 to 16 years old had unpleasant experiences at meetings following Internet contact in 2006 in Norway [38].

- *Stage 4: Online Producer.* This person records the sexual abuse of children for the purposes of distribution to networks and to satisfy their own fantasy. Also, the personal may distribute indecent images and contact details either for financial gain or as part of an exchange relationship. The person may expand into a more business focused role by use of children for prostitution and by promoting sexual tourism as part of a larger personal fantasy scheme.

   Members of an Internet criminal organization called "Fun Club," twenty-five men were arrested, mainly fathers photographed or filmed with web cameras, as they abused their daughters, aged between 2 and 14 years. One father had contacted Sergio Marzola, an Italian producer of child pornography, who offered 250 Euros for the daughter to be filmed dressed in paedophile lingerie, 500 Euros to film them naked, and 750 Euros for him to rape one of them [221]. Sergio Marzola is an example of an offender at stage 4 being an online producer. He had his own photo studios where he abused children that he first contacted on Internet. For example in his photo studio in Ukraine, many poor children were abused. Before he was arrested, he managed thirty Internet sites intended for the exchange of child pornography.

   A 51 year old man was sentenced to 60 years in prison in the USA. He had videotaped himself sexually abusing three children under six. A laptop computer was seized and was found to contain over 16 000 images and over 1000 video files depicting children—many of whom were between the ages of two and ten years old—being sexually assaulted. The suspect admitted sexually assaulting the children. He pleaded guilty to manufacturing child sexual abuse images in Federal

court and was sentenced to 60 years in US Federal prison, without parole, the highest possible sentence under Federal law [29].

A typical offender at stage 2 (online communicator) potentially developing into higher stages (online organizer and online producer) is described by O'Connell [98] as follows, where 'the child' is an adult:

"The child" is befriended by another chat room user who claims to be slightly older in age than the child, and to have similar likes and dislikes. These similarities are discerned throughout the course of a conversation(s) about music, sports, computers etc. These topics can be discussed during one on-line conversation or the process may span a number of on-line encounters, which can occur over a number of days, weeks or even months. The duration of the "friendship-forming" stage can vary quite a bit but the effect is the creation of a shared virtual friendship. Typically, the "virtual friend" presents him or herself as slightly older in age than "the child" and therefore often assumes the role of advisor, confidant or teacher who guides a child toward increasing his or her self-knowledge and self-confidence. Naturally "the child" feels comfortable confiding with this "virtual friend," because the "virtual friend" understands and often proclaims a "deep love" for "the child." When the virtual friend begins to ask "the child" about issues relating to, e.g., sexuality, sexual development or sexual experiences, the child may not interpret these questions as a deviation from mutuality. It is important to recognise the psychological dynamics underpinning the shift in the tone of a conversation into these realms, which serves a number of functions for an alleged paedophile. It seems reasonable to suggest that this kind of conversation is sexually titillating for an adult with a sexual interest in children. Furthermore, the conversation serves to prime the child for the sexual suggestions, which typically follow these introductory remarks. In addition, the disclosures "the child" makes in response to such requests for intimate insights into "the child's" developing sexuality serves to lure the child into an emotionally abusive arena, which they may feel complicit in creating. It seems reasonable to suggest that similar to off-line paedophile grooming practices, the typical net result is that a child feels unable to inform a responsible person about the on-line activities because of a mixture of shame and guilt. The adult with a sexual interest in children may engage in these activities for any number of reasons and may choose to

disengage at any number of points. The adult may simply engage in these activities out of curiosity, to hone his grooming skills, or for masturbatory purposes. Alternatively, the adult with a sexual interest in children may wish to meet the young child in the real world and the encounters may escalate to an off-line meeting. The incidence and outcomes of these meetings have been well documented by the press over the course of the last year. Therefore, it seems reasonable to suggest that there is a need to educate children to be able to detect these shifts in conversation. These activities are very similar to off-line grooming practices except the child often has far fewer cues with which to discern the identity of the person with whom they are conversing.

Potentially dangerous contacts through the Internet with strangers are intriguing to many children. Even the appearance of a meeting suggestion is often not treated as something that can cause anxiety. Sometimes it even inspires imagination. It is more alarming to children when the Internet interlocutor wants to learn specific personal details such as name, surname, and address. Most children know that they are not supposed to provide such information. The exception is if the person they are talking to has a web cam. This is often the proof they need that the person is who they say they are [87].

This finding from Norway by MMI [87] was included in a pan-European qualitative study Eurobarometer [245] covering 29 European countries, where children of 9–10 and 12–14 years were interviewed indepth about their use of online technologies. In the interviews, the children were told a story of a young person of their age who, after putting his/her profile online on the Internet and gradually giving personal details, had established a relationship with someone unknown.

The participants were asked to react to this story. One Danish boy responded as follows [245].

> I met him at a station and then it was an old, nasty, 44 years old man. Then I walked away! I have never told my parents about it! They would get angry. It might have consequences. I might have my mobile phone taken from me.

In almost all groups in a large majority of countries, the study collected a number of personal anecdotes like this one. These anecdotes attested to real, potentially dangerous contacts. It therefore seems that some children adopt a more risky behavior than they say and think they do. In particular

young people aged 12 to 14 can show themselves to be very confident, both in their own insight in unmasking false identities and interlocutors who are especially "friendly" towards them. They are reluctant to warn their parents.

Offender-related perspectives on online victimization of children include: (1) understanding the ways in which sexual abuse is caused with the help of online technologies, (2) understanding how offenders use online technologies to find and target children, (3) the changing nature of grooming behavior, (4) the link between consumption of child abuse material and contact sexual abuse, and (5) the changing profiles of online child abusers [246].

It is really difficult to identify key stages in the grooming process, as the case files we have seen on these guys demonstrate very different approaches and styles. However, it could be that we just have not seen enough of these men (no women yet) to be sure about their behavior, and that is why we think our proposed stage hypothesis is so important.

8.5. Police Investigations

While the expansion of the Internet and the proliferation of information technology have created new opportunities for those who engage in illegal activities [165], the area of digital forensics has grown rapidly as well [254]. This has helped in the discovery of new ways of criminal activities. According to Davidson [225], sex offenders use the Internet to access indecent images of children, to select victims for abuse and to communicate with other sex offenders. This activity has expanded so much that law enforcement agencies have difficulties tracking down child victims and perpetrators involved unless they have the capability of professional digital forensics and intelligence [148].

Rapid growth of the Internet and advances in technology mean enormous benefits to society, and children should be able to enjoy the benefits that the Internet offers safely. However, it is necessary to recognize that with the spread of the Internet comes the growth in the possibility of the system being abused by sex offenders; making contact with children with intent to groom the youngsters through chat rooms and social Internet sites [129].

Dealing with illegal content, on the one hand, and harmful content, on the other, may require using different methods, strategies and tools. However, some tools can be used for all categories. For instance, awareness rising can be used in respect to illegal content and harmful conduct (crime prevention) as well as for harmful content [246].

Successful cyber crime investigations require computer skills and modern systems in policing. Furthermore, modern information systems in policing with access to all relevant electronic information sources require a modern electronic government. Digital government infrastructure must be in place to support the breadth and depth of all government activities, including computer forensics in cyber crime investigations by law enforcement agencies.

Online victimization of children is a global issue in need of international law enforcement solutions. This is particularly true for illegal content. Material depicting child sexual abuse may be produced in one country, hosted in a second, and accessed and downloaded all over the world. Commercial payment systems operating worldwide may be used to fund sale and purchase of the images [246].

Digital forensics is the art and science of applying computer science to aid the legal process. It is more than the technological, systematic inspection of electronic systems and their contents for evidence or supportive evidence of a criminal act. Digital forensics requires specialized expertise and tools. As a term, digital forensics refers to the study of technology, the way criminals use it, and the way to extract and examine digital evidence [254].

Digital forensics is an approach to identifying evidence from computers that can be used in trials. A typical forensics investigation consists of two main phases, exploration and evidence, respectively. During the exploration phase, investigators attempt to identify the nature of the problem and what exactly happened or is expected to happen at the crime scene. The evidence phase takes place after the exploration has been concluded. It consists of accumulating all documentation, which will work in court.

From a data viewpoint, this two-phase procedure can be broken down into six stages: preparation, incident response, data collection, data analysis, presentation of findings, and incident closure. Some of these stages may be so complex in certain circumstances that they are divided into substages. The most time-consuming tasks in digital forensics investigation are searching, extracting, and analyzing. Therefore, there is a need for a forensics model that allows formalization of the digital forensics process, innovative data mining techniques for the forensics process, and a dedicated infrastructure for digital forensics.

8.6. The Need for More Police Intelligence

Contrary to common wisdom, Wolak et al. [181] argue that most Internet sex offenders are not adults who target young children by posing as another

youth, luring children to meeting, and then abducting or forcibly raping them. Rather, most online offenders are adults who target teens and seduce victims into sexual relationships. This is supported in the Norwegian findings, where mainly fifteen and sixteen year old girls have unpleasant experiences in terms of physical or psychological abuse at such meetings with adults [38].

While this chapter presented a stage model where it is assumed that many paedophiles move from one stage to the next over time, several researchers have developed typologies which implicitly seem to indicate an underlying stage hypothesis. An example is O'Connell [99], who developed a typology of child cyber exploitation and online grooming practices. Her typology really represents stages: friendship-forming stage, relationship-forming stage, risk-assessment stage, exclusivity stage, and sexual stage.

Only future research can validate the stage hypothesis presented in this chapter. Empirical studies are needed to evaluate developmental behavior by offenders over time.

A stage model for offender behavior in victimization of children was presented in this chapter. By identifying development and escalation in individual abuse, social and law enforcement authorities may gain new insights into contingent approaches. Future empirical research is needed to validate and potentially revise the suggested model.

An avenue for future research and police intelligence is the classification of offenders into categories similar to categories of rapists as developed by Hazelwood [16]. He categorized rapists broadly as either selfish or pseudo-unselfish. In normal conversation, the word unselfish implies sharing or caring. In the context of rape it has a very different meaning, where pseudo-unselfish behavior indicates a belief in the part of the rapist that his concern for the victim's comfort and welfare will win the child over and hope the child will come to believe that he is not really a bad person. He attempts to involve the child in the act, both sexually and socially. For this type of offender, it is important that the victim acts as though it is an enjoyable activity. This feeds his need for power and acceptance and brings to reality his fantasy of the victim's willing compliance.

Whereas the pseudo-unselfish rapist seeks to involve the victim as an active and loving participant and behaviorally indicates some concern for the child's welfare, no such actions or behavior can be expected of the selfish rapist. He is verbally and sexually selfish and physically abusive. Verbally, this type of rapist will be offensive, abusive, and threatening, while a pseudo-unselfish rapist will tend to be verbally reassuring, complimentary and sometimes talk in a self-demeaning manner by exclaiming that the child does not like him [16].

Once the rapist is broadly categorized as either selfish or pseudo-selfish, Hazelwood [16] further analyzes the rape in an attempt to learn the motivation for the assault. Motivation can be classified into power reassurance, power assertive, anger retaliatory, and anger excitation [16]:

- Power reassurance rapist is a ritualistic, pseudo-unselfish offender driven by the need to reassure himself of his masculin adulthood by exercising his power over children.
- Power assertive rapist is a selfish offender using rape to express his virility and dominance over children.
- Anger retaliatory rapist is a selfish offender identified with anger and retaliation. The rapist is angry with children and use sex as a weapon to punish and degrade them.
- Anger excitation rapist is a selfish offender more commonly known as a sexual sadist—an offender who is excited by the suffering of his victims.

These categories of rapists are interesting for further research and police intelligence. It is important to note here that any classification into categories such as this one by Hazelwood [16] needs to satisfy some criteria to be successful. First, each of the four categories needs to be at the same level. Second, there should be little or no overlap between the categories. Third, no category should be missing. Finally, out of a sample of child abuse cases, there should be some cases for each of the categories as no category should be empty of cases.

The sexual abuse of children is one of the worst crimes imaginable. Through police knowledge and understanding of these crimes and working in partnership with charities, social services, mental health professionals, psychologists and survivors of sexual abuse, law enforcement agencies can learn a great deal more. One thing police know for sure [208], is that children who have been sexually abused suffer very real psychological, physical, sexual, and emotional trauma. For the victim, damage is not simply limited to the duration of the abuse. It does have a very lasting impact throughout the rest of their lives.

A better understanding of the psychology of offending and how child sex offenders operate can help us to recognize behavior that indicates abuse is taking place, or is being planned. By understanding the effects of police interviewers own behavior and use of language, it is possible for police officers to engage in child sex offenders to obtain useful intelligence and evidence [208].

The Child Exploitation and Online Protection Centre in the UK has developed a training course on Internet sex offenders. The course is

designed to provide a general overview of how offenders with a sexual interest in children exploit the Internet. It considers a wide range of subjects, from grooming methods to collector's networks. It also addresses the risk assessment process associated with internet-based offenders and their potential to progress from a position which has no contact with children to actually carrying out sexual offences against them [208].

Conclusion

Both scholars and practitioners have emphasized the need for improved implementation of strategies in law enforcement and policing. At the same time, strategy implementation suffers from a general lack of academic attention. Despite the importance of the strategy execution process, much more attention is paid to strategy formulation than strategy implementation.

This book has made a contribution to the strategy implementation literature by developing a research model to study implementation of police intelligence strategy. Future research might empirically test the suggested research hypotheses.

We want to conclude this book by stressing the importance of organizational learning for policing criminal business enterprises. An organization learns if any of its units acquires knowledge that it recognizes as potentially useful to the organization. Organizational learning enables inferences from history into routines that guide behavior. Because internal expansion is always challenging—due to the organization's unfamiliarity with the environment—organizational learning is key for overcoming the liability to foreignness. Organizational learning's importance also stems from the centrality of knowledge to the organization in that the organization may be understood as a knowledge-creating entity. In other words, an organization can be conceived as a means to acquire, assimilate, and exploit knowledge to achieve organizational ends [26].

An important theoretical approach to organizational learning is the theory of absorptive capacity. Absorptive capacity has been identified as a crucial dynamic capability in knowledge organizations. Absorptive capacity might be defined as an organization's ability to recognize the value of new external knowledge, assimilate it, and apply it to organizational ends [258].

Given the greater availability of external knowledge sources in modern society, a dynamic capability that influences an organization's ability to target, absorb, and deploy the external knowledge necessary to feed the internal investigation process becomes a crucial source of competitive advantage. In other words, police investigations with greater absorptive capacity are expected to outperform investigations with lower capacity.

The complementary use of external and internally developed knowledge is an important source of investigation effectiveness [258].

Absorptive capacity is a multidimensional construct that impinges at different times on different capabilities and routines. A distinction can be made between potential and realized capacity. A potential absorptive capacity enables an organization's receptiveness to external knowledge, while realized absorptive capacity reflects an organization's capacity to leverage absorbed knowledge and transform it into innovation outcome. Similarly, a distinction can be made between the ability to evaluate external knowledge and the ability to exploit it [258].

In research by Fosfuri and Tribó [258], they focused on the first subset of absorptive capacity and empirically explored its antecedents and its impact on innovation performance. Potential absorptive capacity allows an organization to identify and assimilate external knowledge flows that are necessary for its innovation process. In their research questionnaire, organizations rated the importance of several external knowledge sources, such as suppliers, clients, competitors, universities, other research institutions, conferences and meetings, and exhibitions and showrooms.

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