

**THE VALUE OF MODUS OPERANDI IN FRAUD INVESTIGATION:
A SHORT-TERM INSURANCE INDUSTRY PERSPECTIVE**

by

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DECLARATION

I declare “*The value of modus operandi in fraud investigation: A short-term insurance industry perspective*” submitted in accordance with the requirements for the degree of Magister Technologiae in the subject Forensic Investigation is my own work and has not previously been submitted to another institution of higher education. All sources cited or quoted in this dissertation are indicated and acknowledged in the comprehensive list of references.

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ABSTRACT

This study sought to examine the value of modus operandi (MO) information in the investigation of short-term insurance fraud. A comprehensive literature study was conducted concerning the dynamics of MO information in forensic investigation and short-term insurance fraud in South Africa and internationally, and individual semi-structured interviews were conducted with forensic investigators at Santam and MiWay to promote knowledge and understanding of the importance of MO information in short-term insurance fraud investigations.

Results of this research indicate that participants did grasp the significance of MO information in the investigation of short-term insurance fraud. It is, however, apparent that they did not optimally exploit MO information regarding insurance fraud as a result of limited experience, ineffective databases and the inaccessibility of available data – all of which prevent the improvement of utilising MO data pertaining to short-term insurance fraud. Forensic investigators in the short-term insurance industry isolate themselves from each other and fail to share the available MO information amongst each other, resulting in a non-systematic fragmented approach to short-term insurance fraud investigation. The study identifies the challenges and shortcomings experienced by forensic investigators at Santam and MiWay that prevent the optimal utilisation of MO information in the investigation of short-term insurance fraud. The study then suggests a set of recommendations that could assist forensic investigators and other role-players in enhancing the utilisation of such information.

Key terms: Modus operandi, short-term insurance, short-term insurance fraud, false claim, inflated claim.

LIST OF ABBREVIATIONS

ICB	Insurance Crime Bureau
KZN	KwaZulu-Natal
MO	Modus Operandi
SAICB	South African Insurance Crime Bureau
SAPS	South African Police Services
UNISA	University of South Africa

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CHAPTER 1 GENERAL ORIENTATION

1.1 INTRODUCTION

Modus operandi (MO) information has been used successfully during the investigation of all types of crimes, for example, murder, burglaries and rape. “Knowledge of the modus operandi of criminals and methods of their apprehension skill, patience, tact, industry, and thoroughness ... will be everlasting primary assets in detective work” (O’Connell & Soderman, 1936:1). The use of MO information during the investigation of fraud within the short-term insurance industry is becoming increasingly important. By following the MO of criminals, important investigative leads can be obtained to support the investigation by linking fraudsters or syndicates to many other crimes.

Turvey (2002:229) emphasises the importance of proper examination of MO for the following reasons:

- linkage of unsolved cases;
- suspect identification;
- development of investigative leads; and
- suspect prioritisation or elimination.

Gragido and Pirc (2011:120) state that with the technological advancements in recent times, a spike in cybercrime has been evident. Cybercrime entails criminal activity that targets computers, the internet or the use of networks to infiltrate systems and processes. Criminals are no longer committing fraud the old-fashioned way; they have now opted for a more effortless way of committing fraud. Gragido and Pirc (2011:120) explain that cybercriminals sometimes use the same MO; this has been identified by means of malware, and command and control nodes on the internet. It has recently become evident that syndicates are using the same MO to target various short-term insurers by attempting to defraud them of large amounts of money.

James and Nordby (2005:608) draw attention to the disadvantage of using MO during investigation, in that the MO is relied upon and, if there are even slight changes from crime to crime, investigators start looking for different criminals instead of concentrating on the similarities.

The researcher agrees with the authors, but from her experience as an investigator, suggests that the proper application of MO information can only benefit the investigation process.

1.2 BACKGROUND TO THE STUDY

Santam Ltd is the leading general insurer in South Africa with a market share exceeding 22% annualised gross written premium, growth of 9.5% and market capitalisation at almost R20 billion. The business is supported by a world-class contact centre infrastructure, a thriving intermediary network and more than 700 000 policyholders. The group has a subsidiary that operates in Namibia and, through Santam Re, sources business in other countries in Africa as well as in China, India, Indonesia and Malaysia (Santam, 2012).

Santam Ltd also partners with underwriting managers to deliver specialist and niche insurance solutions in a number of underwriting areas, including: marine, sectional title and share block property, industrial and commercial property, risk solutions for professionals, executives and business owners, hospitality and leisure, engineering, aviation, bonds and security, heavy commercial vehicles, crime and civil liability, travel insurance solutions, transport solutions such as minibus, midibus and metred taxis, and legal expense insurance (Santam, 2013).

South Africa's customer satisfaction index survey rated Santam Ltd as the top insurer for 2013 (Santam, 2013). Santam Ltd won Reader's Digest South Africa's Most Trusted Brand survey for 2013. Santam Ltd was also voted the top corporate and commercial short-term insurer for 2012 and 2014 by the Financial Intermediaries Association of Southern Africa. Within its Business Integrity Unit, Santam Ltd has a division identified as Forensic Services, which is mandated by the board of directors to investigate all allegations of fraud. The forensic department of Santam Ltd was established in 1992. Santam Ltd is committed to protecting the interests of honest policyholders and other stakeholders by eliminating fraud and minimising the impact thereof in every aspect of the company's business activities. The goal of fraud prevention within the Santam Ltd Group is to manage the susceptibility to fraud risk with a view to reducing it, and raising the level of fraud awareness amongst employees and other relevant stakeholders. As a process, fraud prevention is not only intended to reduce the risk of fraud but also, upon the occurrence of fraud, to ensure detection and the provision of contingency plans that are focused on protecting the interests of Santam Ltd, where possible. It is furthermore aimed at ensuring the successful prosecution of any offender. The forensic investigators at

Santam Ltd are recruited specifically for their knowledge and skills related to the short-term insurance industry, forensic investigation, criminal and civil law, disciplinary procedures, and information technology.

Santam has two wholly owned subsidiaries that operate under their own licences and with independent brands, namely, MiWay and Centriq. MiWay has its own Forensic Department that investigates insurance fraud and formed part of this study. MiWay is a direct short-term insurance company which offers a range of short-term insurance products, for example, vehicle, home, building, contents, motorcycle, bicycle and watercraft insurance. MiWay received the award for best medium-sized company in the Deloitte's best company to work for survey in 2012 (Santam, 2013).

1.3 PROBLEM STATEMENT

A research problem refers to a difficulty that exists in an area of concern, either in theory or in practice, to which the researcher endeavours to find a solution (Welman, Kruger & Mitchell, 2005:14). Kumar (2005:40) emphasises the importance of formulating a research problem that clearly identifies "what you intend to research."

From the researcher's viewpoint, short-term insurers and life insurers have established that there has been an increase in fraudulent claims over the past few years. Insurance fraud has been identified as a huge problem experienced within the short-term insurance industry. The continuous escalation of fraud within the short-term insurance industry has sparked great concern and created a need for all sorts of intervention to try to curb the increase of fraud and stop insurers from paying fraudulent claims to dishonest individuals. According to Association for Savings and Investments South Africa, approximately 70% of individuals who commit insurance fraud do so because of desperate circumstances and financial pressure due to loss of income attributed to job losses (Buthelezi, 2013).

According to Uys (2014) insurance fraud is difficult to measure because it often goes undetected and there is unfortunately no accurate way of determining the exact extent of insurance fraud in South Africa as there is no central point for gathering this type of data in the country. However, the South African Insurance Crime Bureau (SAICB), now known as the Insurance Crime Bureau

(ICB) which represents majority of South Africa's insurance providers, estimated that 30% of insurance claims submitted in 2013 contained fraudulent elements.

Research based on a global fraud study in 2014 revealed that a typical organisation loses up to 5% of its revenue each year to fraud; this translates to a potential projected global fraud loss of approximately 3.7 trillion dollars (Association of Certified Fraud Examiners, 2014). Santam Ltd has confirmed a loss of R7.3 million to commercial crime in 2013; the 79 cases reported to the South African Police Services (SAPS) included theft, fraud and forgery. It has further been estimated that the South African short-term insurance industry loses R4 billion a year to fraud (Du Toit, 2013). According to the Santam Ltd Annual Forensics Statistics report for the period January 2013 to December 2013 (Santam, 2014), the department experienced an increase of approximately 15.84% in reported insurance fraud cases during 2012/2013. The forensic department investigated a total number of 1 813 cases for the abovementioned period. For the period January 2017 to December 2017, the forensic department reported 57 criminal cases totalling R12.8 million to the SAPS (Santam, 2017). From the researcher's experience, examples of cases investigated are inflated claims and false claims submitted by claimants, service providers and brokers, as well as fraud committed by staff members and syndicate-related fraud.

MiWay's forensic department experienced an increase of approximately 53% in reported insurance fraud cases during 2012/2013 and investigated a total number of 746 cases for the abovementioned period. Claims totalling R58.8 million were repudiated due to fraud and dishonesty (Santam, 2014). For the period January 2017 to December 2017, the MiWay forensic department reported 53 criminal cases totalling R14 million to the SAPS (Santam, 2017).

From the researcher's perspective, people are faced with surviving in an economy that has become distressingly expensive. This has created tremendous financial pressure for the community and contributed to an astonishing increase in insurance fraud in the short-term insurance industry. Individuals responsible for defrauding short-term insurers in South Africa have identified loopholes in the system and ways in which to easily perpetrate fraud, benefiting financially without being detected. The ability to do so has made the potential fraudster complacent in allowing the easy repetition of the crime.

The problem experienced is that most forensic investigators in the short-term insurance industry do not fully analyse the details pertaining to their investigation against their previous investigated cases and statistics within their department or the short-term insurance industry as a whole. Although there are currently advanced technological aids available to forensic investigators, this is not enough to reveal the MO used by criminals. There are disjointed efforts by insurers that form part of the short-term insurance industry in terms of collecting MO information and sharing this knowledge and intelligence.

From the researcher's experience and daily interaction with investigators in the short-term insurance industry, it became evident that forensic investigators fail to maximise the use of MO information during short-term insurance fraud investigations. They do not fully understand the advantages of using MO information during the investigation process. Some forensic investigators lack the knowledge and skills required for the use of MO information during the investigation of insurance fraud.

According to the researcher, there are cases that have been successfully investigated by forensic investigators within the short-term insurance industry because the MO of perpetrators was identified and used to link cases, saving the industry from losing millions to fraud. It was therefore of extreme importance that this research be conducted and forensic investigators be made aware of the benefits that MO information can add by creating leads and linking cases through the use of MO information. This will contribute to the successful investigation of fraud cases, a higher conviction rate of criminals and a reduction in short-term insurance fraud.

1.3.1 Researcher's experience in using modus operandi information during forensic investigations

The researcher is a former police official with six years' investigation experience in the SAPS detective unit. In addition, the researcher has been conducting investigations for the past 10 years at Santam Ltd where she is employed as a senior forensic investigator. The combination of investigative skills obtained from the SAPS and short-term insurance fraud investigations at Santam Ltd has equipped the researcher with the ability to use MO information during her investigations. From the researcher's investigative experience the use of MO information is vital in the investigation of short term insurance fraud. Examples of these cases include linking a staff

member to 89 counts of third-party fraud to the value of R4.3 million, linkage of a syndicate to potential fraud amounting to R16 million within Santam Ltd and actual fraud of R38 million with an entity related to the banking industry, fraudulent travel claims orchestrated by a staff member totalling R8.5 million and the identification of a syndicate submitting staged vehicle accident claims operating within the KwaZulu-Natal (KZN) region.

1.4 AIM OF THE RESEARCH

A research aim is a statement that clearly and broadly points out what the researcher hopes to accomplish, as well as the desired outcomes from the research (Maxwell, 2013:23). According to Mouton (1996:103), the aims of research are to establish facts, gather new data and determine whether there are interesting patterns contained in the data.

The aim of the research was to explore the value of the application of MO information as a method during the investigation of short-term insurance fraud conducted by the forensic departments of short-term insurers in South Africa (Santam Ltd and MiWay).

1.5 PURPOSE OF THE RESEARCH

The purpose of research indicates the direction and focuses of the research and provides the criteria against which the outcomes of the research can be evaluated (Denscombe, 2002:25). According to Babbie (2010:92), amongst the many purposes that social research can serve, the three most common purposes are exploration, description and explanation.

The purpose of this study was as follows:

- To explore, describe and explain the value of using MO information as a forensic investigation method during the investigation of short-term insurance fraud at the forensic departments of various short-term insurers.
- To discover new information and patterns that can be used to maximise the use of MO in order to increase the detection of insurance fraud within the short-term insurance industry.
- To determine recommendations for best practices based on the results of the data collected from the interviews, address any problems identified and improve the

investigative skills of the forensic investigators tasked with investigating short-term insurance fraud.

- To apply new information acquired from the research conducted to further enhance performance and develop good practice in order to empower forensic investigators within the short-term insurance industry with new skills and knowledge pertaining to the application of MO information in the investigation of insurance fraud.

1.6 DEMARCATION OF THE STUDY

This study was limited to the forensic departments at Santam Ltd and MiWay in Gauteng. The forensic investigators at these insurers are mandated to investigate short-term insurance fraud. As a result, this study focused on the application of MO information as a method when investigating short-term insurance fraud. The researcher was of the opinion that this timeframe was sufficient for research purposes to establish the extent to which MO information was successfully utilised during the investigation of short-term insurance fraud. This study focused on two categories of short-term insurance fraud, namely, false claims and inflated claims. These false and inflated claims were based on incidents covered by short-term insurers, for example, motor vehicle accidents, theft, fire, hijacking and burglaries.

1.7 RESEARCH QUESTION

Research questions help narrow the purpose statement into predictions regarding what will be learned in the study or the questions to be answered (Creswell, 2014:139). Punch (2014:65) indicates that the role of research questions is to organise and delimit the project, providing direction and coherence. Punch states further that the research questions provide a framework while specifying the data that will be required.

The researcher focused on the following research question to guide the research study:

- What is the value of applying MO information as a forensic investigation method in the investigation of short-term insurance fraud?

1.8 KEY THEORETICAL CONCEPTS

Keywords are a list of approximately half a dozen of words describing the main areas of interest of one's research (Silverman, 2013:336). Key concepts are defined to enable both the researcher and the reader to understand specifically what each concept means.

The key concepts central to this study are as follows:

1.8.1 Modus operandi

Marais and Van Rooyen (1990:66) explain that *modus operandi* is derived from a Latin term which means "conduct", "manner of conduct" or "operational method of procedure". "Modus operandi" is defined as "a method of procedure; especially: a distinct pattern or method of operation that indicates or suggests the work of a single criminal in more than one crime" (*Merriam-Webster Dictionary*, 2014).

1.8.2 Insurance

According to Kopel (2012:234), insurance is a contract:

between an insurer and an insured, by which the insurer undertakes, in return for the payment of a price (premium), to give the insured a sum of money or its equivalent on the occurrence of a specified uncertain event in which the insured has some interest.

1.8.3 Short-term insurance

Anderson, Dodd and Roos (2006:198) define short-term insurance as:

insurance for your car, home and furniture. Companies offer a variety of products and services to take care of their clients' insurance needs. Products include personal and commercial short-term insurance products, and services delivered to the client through a broker network or, with some companies, through direct marketing.

1.8.4 Fraud

According to Joubert (2001:153), "[f]raud is the unlawful and intentional making of a misrepresentation with fraudulent intent so that the prejudiced person suffers actual or potential prejudice."

1.8.5 Intelligence

According to Cordner and Scarborough (2010:91), intelligence involves collecting and analysing information that relates to the existence, scope and impact of gangs, organised crime, drug trafficking and terrorism. For the purpose of this study intelligence refers to the collecting and analysing of MO information in the investigation of short term insurance fraud.

1.8.6 False claim

According to Kopel (2012:241), a false or fabricated claim is when the insured suffers no actual loss, or no loss covered on the insurance policy. The insured lies or may even cause the loss and later fraudulently represents to the insurer that the loss was caused by an event specified on the policy.

1.8.7 Inflated claim

According to Kopel (2012:241), an inflated or exaggerated claim is when the insured suffers an actual loss but claims for a larger amount. This involves an exaggeration of the loss, which enables the insured to claim for more than the actual loss.

1.9 VALUE OF THE RESEARCH

According to Denscombe (2002:43), the research must be relevant in terms of contributing to existing knowledge, solving practical needs and being of relevance to current issues. This research contributes to the body of knowledge regarding the value of the use of MO information in the investigation of short-term insurance fraud.

Santam Ltd is currently South Africa's leading short-term insurer. Santam Ltd and MiWay receive a huge number of fraudulent insurance claims that are undetected and therefore settled to those claimants who have found ways to penetrate the system and defraud the company. After the completion of this research, this study and the results gained will be of advantage to the forensic investigators of Santam Ltd and MiWay, as well as other short-term insurers, as it will improve their knowledge and competence regarding the application of MO information during the detection and investigation of fraudulent claims.

The outcome of this research will be useful for investigators because it can enhance the investigation of fraud cases. All forensic investigators would benefit from this research because it will empower them with knowledge on the use of MO information during their investigation process. They will also be able to benchmark their current practices against the findings of this research.

The findings can also be used as a tool to rectify shortcomings and enhance training interventions for forensic investigators. The acquired knowledge will also be available to the University of South Africa (Unisa) and the greater academic community. It can be used both in curriculum development and as a source for students and researchers. South African society will benefit if fraud cases can be solved efficiently and timeously, thereby creating a higher conviction rate. Short-term insurers increase insurance premiums as a result of insurance fraud. Reduction of insurance fraud will benefit South African policyholders as they will not be subjected to increasing insurance premiums as a direct result of insurance fraud.

1.10 RESEARCH DESIGN

“Research design is the process of focusing your perspective for the purposes of a particular study” (Babbie, 2011:93). According to Babbie and Mouton (2011:76), empirical research is the production of knowledge based on interviews and observation. Similarly, Punch (2014:2) defines ‘empirical’ as something that is based on direct experience or observation.

In this study, empirical research allowed the researcher to obtain first-hand information from the participants via semi-structured interviews regarding their actual experiences pertaining to the value of using MO information while investigating insurance fraud. The advantage of using empirical research was that it enabled the researcher to obtain comprehensive information from the participants. It also created flexibility for the researcher to probe responses while conducting the interviews.

1.11 RESEARCH APPROACH

The researcher chose a qualitative research approach in support of the empirical research design that was used. This was done by using face-to-face interviews with a semi-structured interview schedule to obtain information from forensic investigators about their practical knowledge and personal experience (Creswell, 1994:21).

Qualitative research is an approach used by researchers to explore and understand social life in its natural habitat through the method of observation (Babbie, 2010:295). According to Creswell (2014:19), when using the qualitative approach, the researcher seeks to identify the phenomenon from the view of participants. Kumar (2005:12) describes qualitative research as an unstructured approach, which is beneficial as it allows flexibility during the research process.

The qualitative approach was best suited to carry out this research as it was the intention of the researcher to obtain practical answers and real-life examples from the forensic investigators tasked with investigating short-term insurance fraud.

1.12 POPULATION AND SAMPLING

According to Mouton (1996:134), a population is a collection of objects, events or individuals with some common characteristic that the researcher is interested in studying.

It would have been ideal to conduct research including all the forensic investigators responsible for the investigation of short-term insurance fraud in the short-term insurance industry in South Africa, in order to determine the true extent of the research problem. Practically, it was not possible to interview all the forensic investigators due to time, financial and geographic constraints. The researcher decided to resort to a target population consisting of forensic investigators attached to Santam Ltd and MiWay, as per section 1.6, who are employed in Gauteng and Cape Town.

The target population consisted of certified fraud examiners, forensic investigators who were previously employed by the SAPS and former members of the National Prosecuting Authority. Some participants also possessed legal and postgraduate forensic qualifications. These forensic investigators were:

- Well-trained and acquainted with knowledge regarding the short-term insurance industry.
- In possession of an immense amount of investigation skill and years of experience.
- Employed to investigate short-term insurance fraud – both opportunistic and organised. Their responsibilities include investigation of all allegations of economic crime perpetrated against the organisation or its clients.

Marshall and Rossman (2011:105) emphasise the need for well-developed sampling decisions, which are to be made in advance, concurrently with the specific data collection methods. The researcher made use of a non-probability sample selected through purposive sampling. Maxwell (1997:69-100) asserts that purposive samples are used when particular people, events or settings are chosen because they are known to provide important information that could not be gained from other sampling designs. In this kind of approach, the researcher exercises a degree of judgement about who will provide the best perspectives on the phenomenon of interest.

Purposive sampling was thus applied to select a sample of 18 forensic investigators (including managers and data analysts) from Santam Ltd and MiWay who investigate incidents of insurance fraud within their respective short-term insurance companies. The sample of the forensic department at Santam Ltd comprised 11 most knowledgeable forensic investigators. MiWay's forensic department comprised 60 forensic investigators; however, only seven of the most knowledgeable forensic team leaders were included in the sample. These 18 forensic investigators were considered to provide the best perspectives on the use of MO information in the investigation of short-term insurance fraud due to their knowledge and experience gained over a lengthy period. Data were gathered until saturation was reached.

1.13 DATA COLLECTION

The data collection process entails creating a framework for the study and collecting data through unstructured or semi-structured observations and interviews as well as documents (Creswell, 2014:189). Marshall and Rossman (2011:137) suggest that qualitative researchers rely on interviewing in depth and analysing documents as primary methods for gathering information. Since a qualitative research method was used in this study, the researcher used interviews and a literature review as data collection techniques.

1.13.1 Interviews

Semi-structured interviews were conducted with participants. “In a semi-structured interview, the research may follow the standard questions with one or more individually tailored questions to get clarification or probe a person’s reasoning” (Leedy & Ormrod, 2013:190). Babbie (2010:318) states that the qualitative interview is based on an in-depth set of topics in contrast to a survey interview, which makes use of standardised questions.

The researcher chose to conduct semi-structured interviews with forensic investigators employed at Santam Ltd and MiWay. Semi-structured interviews were conducted with investigators from both insurers. An interview guide was formulated using the problem statement, research aim and research question. This was advantageous as it created the flexibility required to probe answers from the participants. Real-life experiences, knowledge and examples pertaining to this study were retrieved. Face-to-face interviews were conducted personally by the researcher to maintain consistency. With permission from the participants, a digital recording device was used during the interviews; all interviews were later transcribed to ensure an accurate and complete reflection of participants’ responses.

1.13.2 Literature review

According to De Vos, Strydom, Fouché, Poggenpoel and Schurink (1998:90), the analysis and interpretation of written material provide distinct challenges but enable the qualitative researcher to collect information which could not otherwise have become available. Marshall and Rossman (2011:78) add that a literature review is the basis of a logical framework; it demonstrates gaps identified in previous research and helps refine the research questions. The researcher was guided by the aims of the research, as well as the research questions, when reviewing the literature.

Literature on the use and value of MO information was sourced from the various Unisa Goldfields libraries. A variety of sources, namely manuals, journals, records, documents and magazines, was also utilised in this research. Information published on the internet was accessed and used to determine the latest local and international trends regarding MO.

1.14 DATA ANALYSIS

According to Babbie (2010:117), data analysis takes place once all the data have been collected. The data are interpreted to find conclusions that are indicative of ideas and theories of the initial enquiry.

The researcher used the data analysis spiral as proposed by Leedy and Ormrod (2010:53) to analyse the data collected and followed the steps listed below:

- Interviews and a literature review were the sources of the raw data.
- The raw data were organised by breaking down the units of data into smaller parts. The researcher arranged the data into categories for analysis.
- In perusing the data several times, a better understanding of their contents was obtained to secure a holistic interpretation of the data that were retrieved during interviews, literature reviews and case analysis.
- The researcher then broke down the data into units for classification and analysis, with an attempt to identify the themes and relationships in the data.
- The final step included the synthesis of the data by creating hypotheses and propositions, and compiling tables and graphs to make the research easily understandable for readers.

1.15 METHODS TO ENSURE TRUSTWORTHINESS

Leedy and Ormrod (2013:262) explain that trustworthiness relates to the “extent to which others perceive the study’s findings to be convincing and worth taking seriously.” In the past, trustworthiness of qualitative research was extracted from natural and experimental sciences, and reliability, validity, objectivity and generalisability were the measurement criteria used to judge the soundness of a qualitative study (Marshall & Rossman, 2011:39).

1.15.1 Validation strategies (credibility)

Validity of research relates to the interpretation of observations, irrespective of whether the conclusion reached by the researcher is supported by the data and practical in terms of previously conducted research (Silverman, 2013:285). Validity, according to Denscombe

(2002:100), concerns the accuracy of the questions asked, the data collected and the explanation offered, and generally relates to the data and the analysis used in the research.

An interview guide was compiled based on the problem statement, research aim and research questions. The participants were requested to voluntarily complete an informed consent form. A standard interview guide containing the same questions was used for all participants to ensure accuracy, and quality was maintained throughout the research process.

In terms of validity of the data collection instruments, the interviews were conducted in private and were recorded and transcribed to ensure a true reflection of what the participants had to contribute to the research. A comprehensive review of the literature on the topic was conducted. The data gathered for the purposes of this study were treated in confidence and no data was changed or manipulated in any way.

1.15.2 Methods to ensure reliability (dependability)

Reliability refers to methods of data collection and the importance of data analysis being consistent and not distorting the findings. To ensure reliability, the interviews and the evaluation of the data collected were conducted by the researcher personally to ensure that the analysis was carried out consistently. “Reliability refers to the ability of the research process to provide results that do not vary from occasion to occasion and that do not vary according to the particular persons undertaking the research” (Denscombe, 2002:100).

The researcher made sure that the participants selected for this study were skilled and experienced in the investigation of fraud within the short-term insurance industry. All the data obtained, for example, recorded interviews, transcripts and case studies were kept available for control purposes. The researcher confirms that reliable measures were utilised throughout the research and that no data was manipulated.

1.16 ETHICAL CONSIDERATIONS

Kumar (2005:210) explains that the purpose of a code of ethics is to provide a guide to accommodate changing ethos, values, needs and expectations of the stakeholders. The

researcher abided to University of South Africa's (2007:7) code of conduct for researchers as stated in the *Policy on Research Ethics of the University of South Africa*.

The ethical guidelines that were adhered to during this study, namely, informed consent and preserving anonymity and confidentiality, are discussed below.

1.16.1 Informed consent

The researcher obtained permission from the heads of the Santam Ltd forensic department and MiWay to conduct the research and obtained the written consent of every interview participant. The researcher endeavoured to enter into an agreement with every person being interviewed that they were interviewed at free will and had the option to withdraw should they feel uncomfortable at any stage of the interviewing process. The researcher also notified potential participants from the start what the study involved and allowed them the chance to withdraw. Participation in this study did not entitle participants to any form of compensation, reimbursement, gifts or services.

1.16.2 Preserving anonymity and confidentiality

The researcher strived to maintain each participant's privacy. The interviews were conducted in a safe and private location where the participants could feel at ease. The interviews were conducted at the convenience of the participants and at venues chosen by the researcher. The information obtained from each participant was kept confidential, was not shared with other participants and was only used for the purpose of this study.

1.17 SUMMARY

In this chapter, the research was introduced by providing a short background, followed by an overview of the conceptual framework for the study. The research problem, that is, the failure of Santam and MiWay forensic departments to optimally use MO information during the investigation of short-term insurance fraud, was explored. This was followed by an explanation of the research aim, research objectives and research questions relevant to the study. This chapter further provided a summary on how data were collected and analysed, and included the limitations applicable to the study as well as the research problem identified in the study. The relevant key terms were clarified, and the method chosen to ensure the reliability and validity

of the study was described. This chapter concluded with the ethical framework followed in the study.

CHAPTER 2 AN OVERVIEW OF MODUS OPERANDI AS INVESTIGATIVE TECHNIQUE WITH PARTICULAR REFERENCE TO SHORT-TERM INSURANCE FRAUD

2.1 INTRODUCTION

The researcher is of the opinion that the statistics pertaining to the increase of fraud within the short-term insurance industry show a need for commercial crime investigations to be dealt with more innovatively and efficiently. One such innovative investigative technique that could be utilised with success is the application of MO information in the investigation of short-term insurance fraud. Investigators need to explore the use of creative and resourceful ideas to adequately investigate crimes such as short-term insurance fraud. Short-term insurance fraud committed in modern times is complex to investigate since fraudsters use inventive methods to commit fraud. Investigators benefit from having the latest technological systems at their disposal to assist with investigations. However, these technological aids are sometimes inadequate to assist in successfully solving insurance fraud since fraudsters also have access to advanced technology and methodologies, which enables them to plan and commit crimes with ease.

The significance of MO in the investigation of short-term insurance fraud is underestimated. Forensic investigators lack the knowledge and fail to invest time in utilising information about the MO used by short-term insurance fraudsters as identification technique. This lack of understanding and awareness of the significance of MO information amongst investigators has contributed to the increase in insurance fraud, both locally and internationally. Short-term insurance fraudsters often make use of a specific MO when committing fraud. Once a fraudster is successful with the first attempt, for example, in submitting a false or inflated claim, they would often repeat the same method with confidence as a result of not being detected.

This chapter focuses on the application and value of MO information in forensic investigation, case linkage using MO and record-keeping of MO information. This chapter also provides an overview of short-term insurance fraud and its various subcategories. In addition, this chapter incorporates and presents the outcomes of the interviews conducted with forensic investigators employed at Santam and MiWay's forensic departments. The results of the interviews depict the experiences, feelings and perceptions of forensic investigators in respect of the application

of MO information during the investigation of short-term insurance fraud. The questions and answers of the participants are illustrated followed by interpretation of the responses.

A discussion of the applications of MO information in forensic investigation follows.

2.2 THE APPLICATION OF MODUS OPERANDI INFORMATION IN FORENSIC INVESTIGATION

The factors that can determine or influence MO follow for discussion.

2.2.1 Factors that can determine or influence modus operandi

Bartol and Bartol (2013:35) explain that MO refers to actions followed by an offender to successfully commit a crime. The behavioural pattern is learned as experience is gained in committing the offence. Bartol and Bartol further caution that the MO of repeat offenders may change over time while attempting to develop the most effective method. According to Sennewald and Tsukayama (2001:222), when a crime or misconduct is repeated, by inference, how it occurred becomes predictable and the MO of the perpetrator is consistent. This indicates a solution strategy; for example, if an employee steals funds by fraudulently organising refund documents, that employee will continue to pursue the same specific method of committing theft, as he or she perceives it to be the winning way.

Canter (2004:240) found that behavioural linkage analysis is based on two beliefs: firstly, behavioural stability in that offenders are normally consistent and therefore a series of crimes include common characteristics; and secondly, behavioural distinctiveness, which relates to the view that each offender's crime series represents specific features that successfully serve as his or her behavioural signature. In support of Sennewald and Tsukayama (2001:222), Turvey (2012:336) explains that offenders distinguish and utilise more proficient and effective ways when committing crimes. Repetition of these traits in future offences increases their skill, which strengthens and fortifies their MO.

According to Turvey (2012:336), MO behaviour is influenced by factors such as:

- educational and technical materials;
- trade or professional experience;

- criminal experience and confidence;
- contact with the criminal justice system; and
- the media.

MO behaviour can also change due to the perpetrator's deteriorating mental state, the influence of controlled substances or an increased confidence that he or she will not successfully be apprehended. These factors may influence the perpetrator in becoming less skilful, less competent and more careless (Turvey, 2002:32). The researcher supports the above sentiments of Sennewald and Tsukayama (2001:222) as well as Turvey, as it has become evident from previous investigations that fraudsters have a tendency to lack attention to detail when fabricating documents or providing information when submitting a fraudulent claim. The researcher is of the view that this happens when fraudsters become more complacent and confident.

Bennett and Hess (2004:5) highlight the fact that some criminals are responsible for committing different crimes, influenced by opportunity, need, sophistication or the inability to repeat certain crimes. Bennet and Hess suggest that care must be taken not to eliminate suspects if the MO does not match the crime under investigation. Marais and Van Rooyen (1990:66) support this, listing the following as additional factors which determine the MO of criminals:

- opportunity to commit a crime;
- physical qualities;
- changing needs and desires;
- the situation in which they find themselves; and
- knowledge and experience.

According to Van der Westhuizen (1996:33), past research has indicated that criminals tend to follow a constant, "stereotyped pattern of conduct" and often use individualised techniques during the commission of a crime.

Tupman (1998:3) illustrates that it is not certain that, if one suspect utilises a specific MO, he or she is the only suspect using that MO. Likewise, when groups of criminals are known to commit a particular crime in a particular fashion, it is not safe to assume that new criminals are

not following the same trend. For this reason, Tupman points out that stereotyping can be dangerous and explains that changes in MO need to be examined in white collar crimes, such as fraud, because fraudsters have a tendency to change their pattern of behaviour in response to new opportunities.

Santos (2013:172) concurs with Tupman (1998:3) and is of the opinion that relationships amongst incidents and identified patterns are educated guesses made by crime analysts. Santos therefore asserts that, unless a perpetrator is arrested and confesses, there is no surety that a specific suspect is responsible for committing crimes that are linked by the same MO.

Participants in this study were asked to answer questions regarding the utilisation and management of MO information as well as the value associated with MO information during the investigation of short-term insurance fraud. Participants were asked the following question: *From your experience, what factors can determine or influence a short-term insurance fraudster's modus operandi?* The purpose of the question was to investigate participants' interpretations of the value of MO information in the identification of short-term insurance fraudsters.

It appears from the responses that the participants were knowledgeable regarding factors that may influence a short-term insurance fraudster's MO. Various reasons were provided, and the participants' responses to the question are summarised as follows:

- Ten participants shared the opinion that weak processes and controls within the environment created loopholes that influenced a short-term insurance fraudster's MO.
- In addition, eight participants were also of the view that a short-term insurance fraudster's MO was influenced by opportunity, financial pressure and greed.
- Four participants highlighted the fact that fraudsters and criminal groups kept abreast of the latest trends and technology, providing fake identities and false information to avoid being detected.
- One participant believed that the time of month and type of claim submitted also influenced the MO of a fraudster.

- One participant had a different opinion to the other participants and stated that flags placed on the system of clients that either committed fraud or had dishonest claims also influenced the MO of fraudsters, in that they resulted in elimination.

In relation to the above literature on factors that can determine or influence MO, the feedback received from the participants clearly indicates that participants were knowledgeable about the aspects that could affect a short-term insurance fraudster's MO. Weak controls and processes within the environment seem to be the major contributing factor that enables fraudsters to successfully commit fraud with ease.

The value of MO information in forensic investigation follows for discussion.

2.3 THE VALUE OF MODUS OPERANDI INFORMATION IN FORENSIC INVESTIGATION

The identification and application of MO information during fraud investigation is extremely beneficial because there is a documentary trail that can link crimes through bank accounts, identity numbers, handwriting, email, cell phone numbers or addresses, unlike with serious and violent crimes. Sennewald and Tsukayama (2001:31) state that the most important aspect of intelligence to the investigator is mental recall or memory. This is the skill to remember small details that may seem unrelated but may later help in making logical connections which result in solving the case at hand. Examples of these details include names, events, faces, vehicles, a phrase or even a criminal's MO.

Hollin (2013:275) emphasises that the use of MO information has several benefits, such as successful crime linkage. In addition, the accurate collation of information adds weight to evidence against the offender and increases the chances of conviction. MO information additionally allows for a set of crimes to be investigated as a group instead of individually, with the result that resources can be used more efficiently.

Van der Watt, Van Graan and Labuschagne (2014:64) explain that, in addition to linking cases, MO also gives understanding relating to the intentions and individualities of the offender.

Being alert about the perpetrator's MO can assist investigations in the following manner (College of Policing, 2017):

- Recognising how a specific crime has been committed, the type of material that could have been generated in the commission of the offence and the whereabouts of this material.
- Detecting a linked series of crimes committed with the same MO.
- Identifying links between crimes and known offenders who make use of the same MO.
- Predicting imminent crime patterns, enhancing the possibility of apprehending offenders.

Osterburg and Ward (2010:120) further suggest that MO information can assist in the identification and apprehension of a suspect and can additionally be utilised in planning approaches for preventing crime. Gathered MO information can result in an investigator searching records, setting up surveillance or procuring an informant. Marais and Van Rooyen (1990:66) underpin MO as an identification technique that affords individualising value during investigations. This can reduce the number of suspects involved, thus providing direction with regard to the entire investigation process. Marais and Van Rooyen further advocate that the MO of criminals is worthless in the absence of proper exploitation of the information and the failure to study, classify and record this information for future comparison and identification. Van der Westhuizen (1996:64) reinforces that the results retrieved with the aid of MO information are reliant on the administration and control of the MO system. The usage of the system in a meaningful, scientific way is dependent on the knowledge, skill, dedication and precision of the investigator.

In this regard, participants were first asked the following question: *Do you use modus operandi information during the investigation of short-term insurance fraud?* The purpose of the question was to determine whether participants used MO information during their investigation of short-term insurance fraud.

All the participants acknowledged using MO information during the investigation of short-term insurance fraud. The participants' motivations for their answers included the following:

- Experience in identifying MO is a very useful tool during investigations.
- Using MO information makes investigation easy and reduces turnaround times in resolving investigations.
- Searches are conducted with trigger words on the database to monitor commonalities in claims example, bank account numbers, and cell phone numbers, email addresses, location etc.
- If used effectively, MO information can aid in linking suspects to several policies and claims.
- Using MO information assists in detecting more fraudulent activity than initially reported.
- Intelligence is used to identify crime patterns to determine MO of offenders.
- Information on MO circulated via the Insurance Crime Bureau (ICB) allows for successful identification of syndicates targeting various insurers, which also prevents insurers from paying false claims.

Secondly, participants were asked the following question: *In your opinion, is there any value in applying modus operandi information as a forensic investigation method in the investigation of short-term insurance fraud?* The purpose of the question was to explore whether participants understood the value of applying MO information during the investigation of short-term insurance fraud.

- All the participants agreed that there was definite value in applying MO information as a forensic investigation method in the investigation of short-term insurance fraud. In addition to the above motivation provided, participants provided the following opinions:
 - MO information enables identification of all transactions, allowing more comprehensive investigations to be carried out.
 - MO information helps in developing effective controls to prevent fraud from occurring.
 - MO information helps in detecting control breakdowns in underwriting and the claims environment.
 - MO information allows more effective information seeking interviews to be conducted.

- Two participants were of the view that more concerted efforts should be made by insurers to provide comprehensive information in order to effectively identify MO patterns.
- In contrast to the other participants, one participant was of the opinion that there needed to be a proper understanding of the subject; in other words, an investigator would need to understand how criminals operate in order to identify MO patterns.

In relation to the above literature on the value of MO information in forensic investigation, it is evident from the participants' responses that they not only used MO information during the investigation of short-term insurance fraud but also understood the importance and value thereof.

A discussion on case linkage using MO is presented in the next section.

2.4 CASE LINKAGE USING MODUS OPERANDI

“A crime series is identified only when enough similarities exist to support the theory that the same person or persons perpetrated a set of crimes” (Osborne & Wernicke, 2003:21). According to Dempsey (2003:36), components that enable investigators to learn and understand facts regarding an occurrence during the investigation process include patterns, leads and tips. Dempsey describes a pattern as a series of similarities that can be used to link specific cases or point out that the same individual committed a series of crimes. These patterns can include details such as time, MO, victim, location and description of offender.

MO plays an important role when attempting to link cases (Yokota & Watanabe, 2002:5). This view is supported by James and Nordby (2003:539), who proclaim that the traditional technique to link cases is by identifying a criminals MO.

The researcher states that investigators can effectively investigate and link fraudulent claims using a number of the following techniques:

- Following the discernible pattern utilised by the fraudster to falsify documents submitted for the claim.
- Discovering similarities in descriptions of events provided.

- Repeated use of the same cell phone number, street address, postal address, bank account or email address.
- Location of crime or where the fraud is committed.
- Handwriting.
- Voice identification.
- MO.

Case linkage is becoming a necessity during the investigation of short-term insurance fraud, as a trend has been identified with individuals and syndicates in that they are applying the same MO, using the same details, for example, invoices, registration numbers, identity numbers and descriptions of losses, when submitting false claims to various insurers.

According to Woodhams, Bull and Hollin (2007:117), evidence relating to a perpetrator who is responsible for committing a series of crimes is not only useful for the purposes of investigation, but similar fact evidence has also proven to be beneficial when presented in legal proceedings. In support of this view, James and Nordby (2003:523) declare that, from an investigative perspective, the linking of crimes enables investigators to track one suspect instead of functioning without the knowledge that particular cases are linked. Police investigators and prosecutors also have a need to have similar cases linked; the purpose is for the offender to be tried on multiple charges in the same trial.

In this regard, participants were asked the following question: *Do you use MO to identify similarities that can be used to link specific cases or point out that the same individual committed a series of crimes?* The purpose of this question was to determine whether participants used MO information to identify patterns and link multiple cases to a specific individual. A summary of the participants' responses follows:

- All the participants expressed that they used MO to identify patterns and link various cases to the same individual or syndicates. This was made possible in any of the following ways:
 - Experience and mental recall.
 - The use of MO red flags to link cases or persons.

- The use of data analytical tools to run checks on personal details, such as ID numbers.
- In contrast to the abovementioned participants, one participant acknowledged that he did not use MO information to link cases often, because various people worked with different clients and claims and the possibility of identifying MO was therefore limited as information was only shared during meetings.
- One participant pointed out that data analysis could be restrictive as it was limited to the company database. Although the ICB assists with sharing information across the short-term insurance industry, this is still not comprehensive as not all short-term insurers are members of the ICB.

In relation to the above literature on case linkage using operandi information, it appears from the participants' responses that, although MO information is used to identify similarities and link cases, the short-term insurance industry is still not utilising MO information effectively.

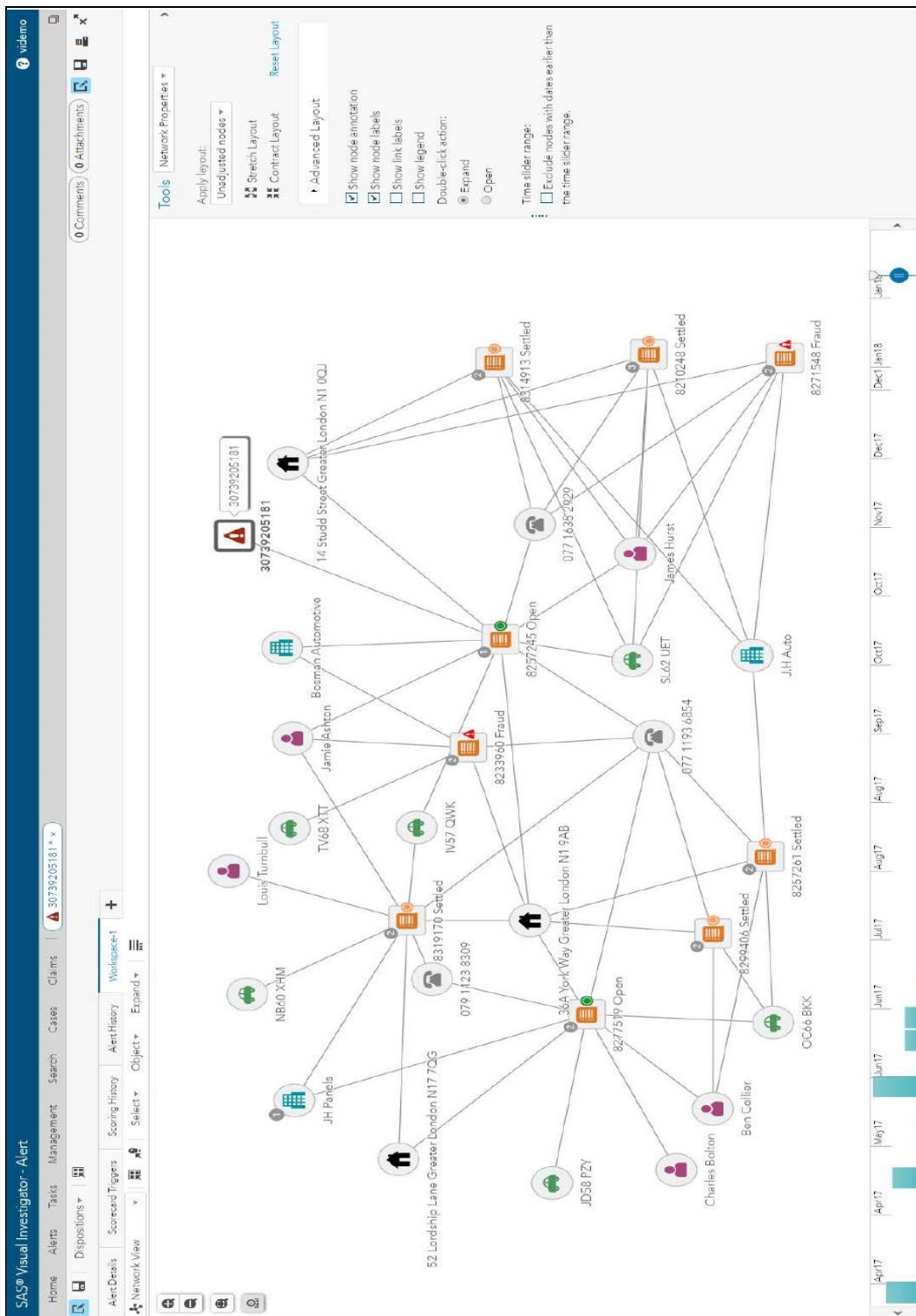
The management of MO information is discussed in the subsequent section.

2.5 RECORD-KEEPING AND MANAGEMENT OF MODUS OPERANDI INFORMATION

Yotoka and Watanabe (2002:5) states that MO files allow investigators to identify a form of criminal behaviour and to link a group of crimes to a single offender by means of recorded information. Osterburg (1968:154) emphasises that record-keeping adds value to the investigation process, explaining that records should be regarded as stored information, which should be retrieved by an imaginative investigator should the need arise. These records can be extremely beneficial in providing new leads, identifying offenders, tracing suspects and recovering stolen property. Storage of MO information can be maintained in various ways, ranging from electronic mapping technologies to in-house data banks (Adderley & Musgrove, 2003:265). In addition to the various data systems managed within the forensic departments, an advanced data analytics software company called SAS is becoming extremely popular and is currently being used by the ICB and Santam (Ltd). Santam (Ltd) recognises the value technology plays in detecting and preventing insurance crime, Santam has therefore implemented a strategy to employ technology in the fight against insurance fraud. The SAS

Fraud Framework uses technology and several data sets to identify high risk transactions and relationships (Figure 2.1). These high risk transactions and relationships are thereafter analysed to determine if there are any elements of fraud or if there is a need for further investigation.

Figure 2.1: SAS Visual Investigator Alert diagram illustrating links to vehicles, addresses, cell phones and bank accounts



(Hartley, 2018:17)

The researcher explains in absence of advanced technology, claims under investigation are normally shared amongst several forensic investigators working within a department. These claims get investigated and the MO information pertaining to the fraudulent claim is generally captured on the company's database in isolation under a specific reference number. If various fraudulent claims are submitted by a serial fraudster or syndicate, identifying links with MO becomes virtually impossible. It is therefore significant to compile a spread sheet or table to identify trends and commonalities of serial offenders.

Table 2.1 below illustrates an example of a matrix that could also be used effectively to identify the MO of fraudsters. The rape matrix can be adapted and used to collect MO information during the investigation of short term insurance fraud.

Table 2.1: Rape matrix results for the 'Kwadwesi Bush Rapist'

Kwadwesi	Case 3	Case 4	Case 5
Active for investigation	175 days	229 days	177 days
Scene	Kwadwesi bushes opposite Kwadwesi extension	Kwadwesi bushes at the back of the shopping complex	Kwadwesi bushes
Victim	Black female, 15 years old	Black female, 32 years old	Black female, 16 years old
Date	2007-01-19	2007-03-03	2008-01-16
Day	Friday	Saturday	Wednesday
Time	08:00	07:30	14:45
Suspect description	Black male	Black male	Black male
Clothing description	Navy blue tracksuit top, black pants with yellow stripes, torn white dirty sports shoes, maroon and white balaclava, 'Chinese-like' eyes, scales on hands.	Navy trousers, dotted black and white shirt, blue and white sports shoes.	Not mentioned.
Approach by suspect	Blitz: The victim was on her way to school taking a short cut through the bushes. The suspect grabbed her from behind, around her waist and arms and also strangled her.	Blitz: The victim was on her way to visit her boyfriend when the suspect strangled her from behind and ordered her not to scream. She was ordered to go deeper into the bushes.	Blitz: The victim was on her way back from school when she was suddenly grabbed around her neck by the suspect and dragged into the bushes.
Control over victim	The suspect made verbal threats and was in possession of a knife.	The suspect was in possession of a knife.	The suspect was in possession of a knife.
Victim raped	The victim was raped three times vaginally.	The victim was raped continuously until the suspect ejaculated.	Raped once: "He wet his fingers and my vagina before everything started"
Unique actions or verbal interaction	The victim was told to put down her bag, pull down her pantyhose and take off her clothes.	The suspect repeatedly told the victim to take off her clothes.	The suspect told the victim to take off her panties. He also told her to "shut up" when she cried and not to scream.
Condom used	No	Not mentioned	No
Stolen items	None	None	None
Harm to victim	Strangled	Strangled	Grabbed from behind around her neck (strangled)

(Van der Watt et al., 2014:68)

A matrix containing detailed information attempts to determine the identity of the perpetrator, MO used, pattern of behaviour, mapping of the crimes as well as timelines followed.

Firstly, participants were asked the following question: *Do you keep a record of modus operandi information pertaining to short-term insurance fraud?* The objective of this question was to confirm whether MO information is effectively managed by participants.

- Eight participants from MiWay confirmed that they keep records of MO information pertaining to short-term insurance fraud. The information is stored on their internal database and is also shared with the ICB.

A summary of the Santam participants' responses follows:

- Six participants stated that records were kept of MO information, either captured on a case management system, on spreadsheets or in the form of working papers.
- In contrast, five participants indicated that there were no formal records available containing accurate MO information.

Secondly, participants were asked the following question: *Do you make use of a database or an integrated approach, which interlinks with other short-term insurers to examine and verify your information, ensuring the correctness and value thereof?* The purpose of this question was to ascertain the quality of MO information obtained by participants and to establish whether they share this information amongst other insurers.

Thirteen participants confirmed using their internal database and making use of the ICB to channel enquiries, verify and share information with other short-term insurers in the industry. Additionally, varied views were obtained from individual participants as follows:

- A joint approach maintained between MiWay and Santam was acknowledged in that fraud lists were compared to identify commonalities.
- There is difficulty in linking systems with other insurers due to different operating technologies.
- Short-term insurers are not cooperating as they are bound by confidentiality.

- There is a need for more concerted efforts between insurers to share information that will assist in identifying trends.
- Interaction with the ICB takes time, as there is an absence of a direct automated process linking to other insurers.
- The internal database does not capture MO-specific detail and therefore cannot provide effective link analysis.
- Short-term insurers work in silos and do not provide detailed MO information.

In contrast to the above literature on case linkage using modus operandi information, it appears from the participants' responses that the lack of information-sharing and coordination between short-term insurers in South Africa is a motivating factor for limited knowledge pertaining to different MO trends used by fraudsters.

An overview of short-term insurance fraud is presented next.

2.6 AN OVERVIEW OF SHORT-TERM INSURANCE FRAUD

The purpose of short-term insurance, a contextualisation of insurance fraud and types of short-term insurance fraud follow for discussion.

2.6.1 The purpose of short-term insurance

The purpose of short-term insurance is to protect personal or business assets, such as one's home, home contents and motor vehicles, against liability claims and accidents. Insurance is a type of safeguard given to victims of crime, accidents and certain other mishaps or acts of nature (Masters & Dupont, 2002:36). Upon the occurrence of such an event, the client is indemnified for the loss and placed in more or less the same position he or she was prior to the happening of the said event. Insurance therefore plays an important role in society (Hoppe, 2012:1).

Insurance can be defined as a "risk distribution system that requires the accumulation of liquid assets in the form of reserve funds" – these funds are then made available to pay out claims in terms of losses suffered by policyholders (Association of Certified Fraud Examiners, 2012). Viaene and Dedene (2004:314) define insurance as a contractual relationship in which an insurer agrees with a policyholder on the payment of a premium to make financial provision on behalf

of the insured party to provide cover after a formal claim has been submitted for the loss of an insurable interest resulting from one or more future indefinite events.

Grant (2012:5) further explains that insurance involves individuals or entities referred to as policyholders paying a premium at regular intervals into an insurance fund from which money is taken to pay a claim to compensate policyholders who have suffered a loss that is covered by the insurance contract.

Skipper (1997:13) summarises the way in which insurance contributes to society and economic growth as follows:

- It allows for the efficient management of different risks.
- It reduces or mitigates loss.
- It promotes financial stability and enhances peace of mind.
- It relieves the government's burden of providing social protection services to citizens.
- It promotes trade and commerce, supporting businesses and economic growth.
- It mobilises domestic savings.
- It increases effective distribution of capital, advancing the development of financial services.

According to Rejda and McNamara (2014:49), the major social and economic purposes of insurance are the following:

- Indemnification allows the insured to be placed back to their former financial position after the loss occurs.
- Fear is reduced before and after the loss, as individuals are adequately covered in the event of a loss occurring.
- The insurance industry is an important source of funds for capital investment and accumulation.
- Insurance companies employ a wide variety of loss-prevention personnel and are also actively involved in loss-prevention programmes.
- Insurance enhances a person's credit and makes the borrower a better credit risk.

It is emphasised that it is a legal requirement for all parties transacting in the context of an insurance contract to act in utmost good faith toward one another throughout the existence of the contract. This obliges them to reciprocally disclose all material information known to them. Lack of good faith, however, is not by implication an indicator of fraud. Fraudulent activity by either party is confirmed by the presence of a material misrepresentation, intent to deceive and the aim of gaining an unauthorised benefit (Bland, 1999:16; Viaene & Dedene, 2004:314).

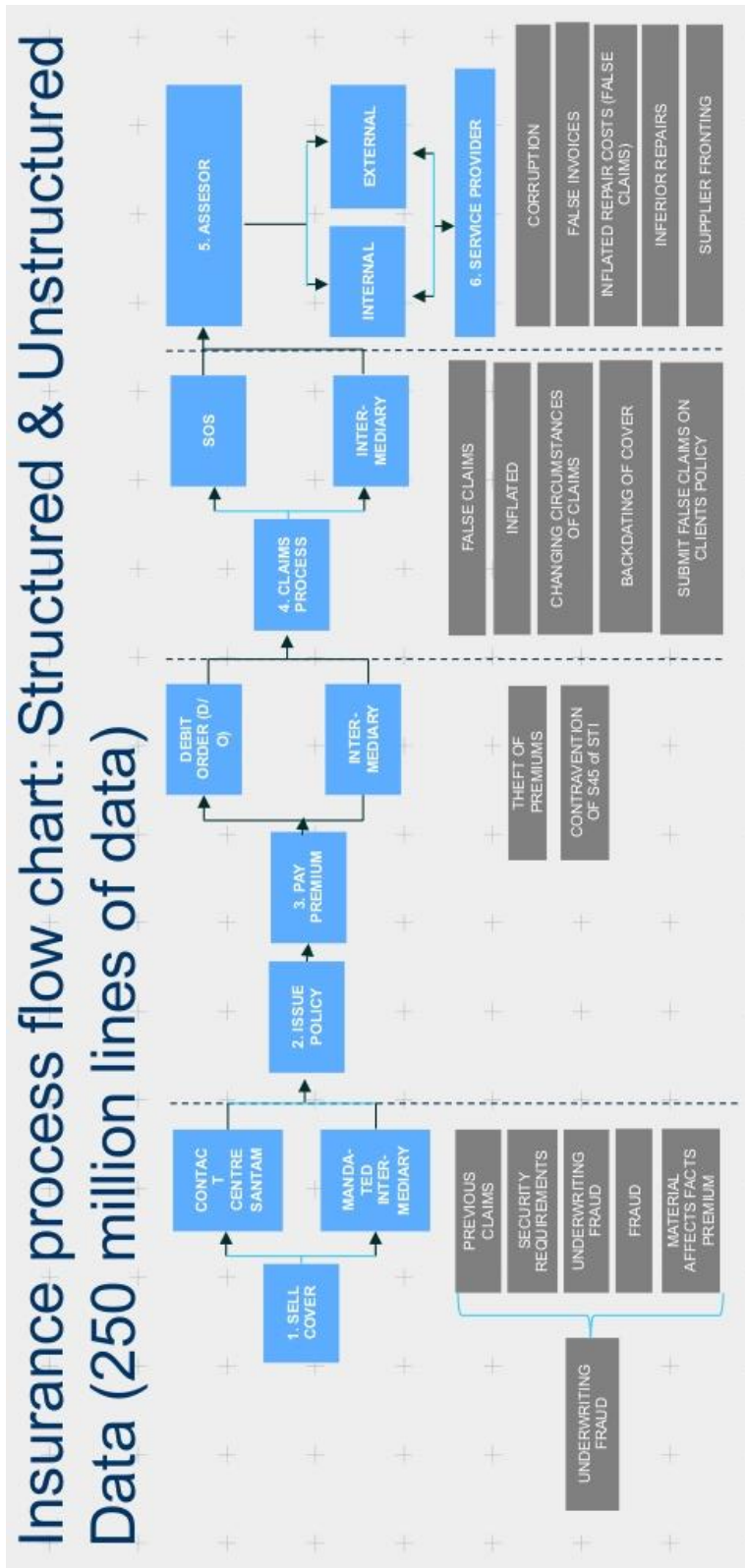
A discussion on contextualising insurance fraud is presented next.

2.6.2 Contextualising insurance fraud

Lesch and Byars (2008:412) define insurance fraud as “a deliberate deception perpetrated against or by an insurance company or agent for the purpose of financial gain.” Insurance fraud has existed ever since the concept of insurance was introduced (Dalko, 2017:644). Fraudulent claims account for a significant portion of all claims received by insurers, and cost billions annually. Insurance fraud arises when the insurer is unable to conclude whether claimed accidents really happened. In that instance, policyholders have an incentive to claim even if the incident did not occur (Okura, 2013:121). Types of insurance fraud are diverse and occur in all areas of insurance. Insurance crimes also range in severity, from slightly exaggerating claims to deliberately causing accidents or damages. Fraudulent insurance activities also affect the lives of innocent people, both directly through accidental or purposeful injury or damage, and indirectly through causing insurance premiums to be higher. A survey conducted by Ernst and Young (2011:2) indicates that insurance fraud poses a significant problem, and governments and other organisations are making efforts to deter such activities.

Insurance Europe (2013:7) emphasises that fraud affects all types of insurance, including non-life insurance, life insurance, protection cover and health insurance. Insurance Europe further illustrates that insurance fraud occurs when untruthful or incomplete information is provided on application and proposal forms, or when a claim is submitted with an intention to gain benefit under the insurance contract.

Figure 2.2: Insurance process flow chart: Structured and unstructured data



(Chetty, 2014:5)

Figure 2.2 above depicts the insurance process of the different types of fraud that occur from the underwriting phase until claim finalisation stages, as well as the entities involved.

An overview of the different types of short-term insurance fraud follows for discussion.

2.6.3 Types of short-term insurance fraud

The types of short-term insurance fraud include claims following events that did not happen, for example theft, burglary and hijacking, as well as inflated claims, which involve claiming for more expensive items than what were actually lost. In a well-explained breakdown, Kopel (2012:241) lays out the three different types of fraud in the context of insurance policies as follows:

- **Fabricated claim:** “When the insured suffers no actual loss or no loss covered on the insurance policy. The insured lies or may even cause the loss and later fraudulently represents to the insurer that the loss was caused by an event specified on the policy.”
- **Exaggerated claim:** “When the insured suffers an actual loss but claims for a larger amount. This involves an exaggeration of the loss enabling the insured to claim more than the actual loss.”
- **Valid claim accompanied by fraudulent means:** “This is the least serious form of a fraudulent claim which involves a technical or petty fraud designed to reduce delay in payment.”

According to the researcher inflated claims are the most prevalent type of insurance crime but have a low rand value per incident. There are fewer incidents of organised insurance crime, but the rand value is substantially higher. Both organised and opportunistic insurance crime are extremely complex to investigate and to police.

Rose (2008:2) provides a definition of opportunistic and professional fraud as follows:

- **Opportunistic fraud** “is usually perpetrated by an individual who simply has a chance to inflate a claim or get an exaggerated estimate for losses or repairs from his or her insurance company.” Opportunistic insurance crime is usually perpetrated by an individual who increases the value of an item or claims for an item not lost or that he or

she did not own when a legitimate loss occurs; example a client claims for a Sony PlayStation 3, he or she did not own when submitting a claim for a legitimate burglary claim. This is commonly referred to as inflated claims or claim padding.

- **Professional fraud** “is often perpetrated by organized groups with multiple, false identities, targeting multiple organizations or brands.” Planned or organised insurance crime is usually perpetrated by a group of individuals who work together to defraud insurers, for example, corruption between supplier and assessor. The assessor allows the supplier to over quote and, in return, the assessor receives a kickback.

Short-term insurance fraud is committed both internally and externally. Insurance crime is generally committed by the following: policyholders, brokers, suppliers, employees and insurance companies. The types of crimes committed by each group differ and can be classified as follows:

- Policyholders: False claims, inflated claims, underwriting fraud, backdating of cover.
- Brokers: Theft of premiums, false claims, corruption.
- Suppliers: Corruption, false/fictitious invoices, false claims, inflated repair costs.
- Insurers: Policy churning, mis-selling.
- Employees: Corruption, false claims, theft, electronic funds transfer fraud, unethical conduct (Viaene & Dedene, 2004:315).

Santam case studies relating to broker fraud are as follows:

- In 2016, an employee of a brokerage was investigated and confessed to incepting 20 fictitious policies and subsequently creating false damage reports, quotations and invoices alleging that various appliances were damaged because of lightning. The fraudster submitted 137 false claims against these bogus policies, totalling R1.3 million. The case was handled by the Commercial Crime Court and the employee was convicted.
- In 2013, Santam investigated a case where the policyholder trusted a broker and paid over R700 000 as part of annual premiums over a five-year period. The broker forged the policy, creating an impression that the client had a valid policy. It was only when the client had a windscreen claim that he became aware that he did not have insurance and had been defrauded. Further investigation revealed more incidents using the same MO.

Consequently, the broker confessed that she committed insurance fraud to support her drug habit.

Participants were asked the following question: *Name the different types of short-term insurance fraud that you typically investigate?* The purpose of this question was to obtain an overview of the common types of insurance fraud. In summary, the participants responded to the question as follows:

- All the participants confirmed investigating false, fraudulent and inflated claims. They provided examples of the types of fraud cases normally investigated as follows:
 - staged accidents;
 - fast-track claims;
 - false theft of motor vehicles and hijacking;
 - driving under the influence (non-disclosure);
 - false third-party claims;
 - goods in transit (submitting false information);
 - identity fraud;
 - false policies;
 - premium theft;
 - loss prior to policy inception;
 - backdating of cover;
 - bribes and kickbacks;
 - financial statement fraud;
 - procurement fraud;
 - duplicate claims;
 - dual insurance;
 - underwriting fraud;
 - BEE fronting;
 - syndicate operations;
 - fabricated or false invoicing; and
 - collusion with suppliers.

Various case studies regarding short-term insurance fraud investigations are presented next. Short-term insurance fraud is divided into two categories (Deloitte, 2012; Lesch & Byars, 2008:412), namely hard fraud and soft fraud.

Hard fraud occurs when a person deliberately plans or invents a loss, such as a collision, false hijacking or fire that is covered by his or her insurance policy in order to receive financial benefit for the damages. A hard fraud scheme is sometimes relative to syndicates and involves millions.

Case study 1

“Project Mavis” is a current investigation managed by the ICB involving the actions of a large number of individuals responsible for incepting policies at various short-term insurers and planning staged accidents with the purpose of obtaining rental vehicles in the process. The investigation has revealed that this fraud was orchestrated by 10 syndicates using the same MO operating in specific areas within KZN. These criminals identified opportunities which were later exploited for financial benefit. The investigation involves verifying information, conducting interviews, obtaining statements and networking between investigators from various car rental companies, affected member companies and the SAPS (Insurance Crime Bureau, 2017).

Case study 2

“Multiple policy disorder – Lion of Africa.” The perpetrator incepted policies at various insurers at the same time, making use of stolen identities or of those belonging to family members. The MO included submitting claims for building-related damages and all-risk items such as prescription spectacles and laptops. He would subsequently avoid the insurance company, using the excuse of lack of service, so that he could repair or replace items by himself. He later submitted false invoices in return for a cash settlement. This MO is common, but the case is also unique because it involved one individual, using 30 identities, defrauding four major insurers with an estimated loss of over R1 million (Krige, 2013:107).

Soft fraud is more common and is sometimes referred to as opportunistic fraud. It involves inflation of a valid claim or the submission of false information when obtaining a new insurance policy in order to obtain a lower premium (Deloitte, 2012; Lesch & Byars, 2008:412).

Case study 3

An example of a case study that the researcher investigated involved Mr X who obtained a policy and alerted Santam that his adult son, Y, who lived with him, did not have a valid driver's license. The policy clearly indicated that no claim for a loss or injury would be entertained if Y were driving the insured vehicle in the event of an accident. However, after Y had crashed his father's car by driving into a telephone pole, his father lied and stated that he had been the driver when the loss occurred.

According to the researcher, some indicators of claims being fraudulent include the following:

- a claim being submitted within a short period after the policy was incepted,
- the insured having a history of insurance claims/losses,
- identification of patterns of claims (e.g., repeated claims for similar losses),
- when the insured is unable to provide reasonable proof of ownership,
- vague information provided by policyholders,
- when there is continuous pressure for the insurer to settle the claim,

Information and statistics regarding the cost of insurance fraud follow for discussion.

2.7 THE COST OF SHORT-TERM INSURANCE FRAUD

The actual financial loss attributed to insurance fraud is unknown; it is difficult to measure insurance fraud because so much goes undetected. The statistics on insurance fraud obtained throughout the world are only estimates, but the impact is known to be substantial. Various organisations and insurance companies assert that it is extremely difficult to determine the exact value of money stolen through insurance fraud. Insurance fraud is designed by fraudsters to be undetectable in comparison to visible crimes such as robbery and murder (Brooks, Button, Lewis & Shepherd, 2015:189).

The insurance industry ranks the highest amongst industry sectors who report fraud (PricewaterhouseCoopers, 2011). In South Africa, the South African Insurance Association estimates that approximately 10% of claims contain an element of fraud, which equates to between R2 billion and R3 billion a year. The SAICB reports that fraudulent claims pertaining

to laptops, cell phones and motor vehicles increased by as much as 10-12% during 2010. KPMG, which has been responsible for conducting a global insurance fraud survey for the past 21 years, has rated South Africa as a country with the second-highest significant increase in fraudulent claims since the outset of the economic recession (Le Roux & Whisgary, 2011).

Insurance fraud has become prevalent globally. The National Insurance Crime Bureau reported that, in 2011, questionable claims had exceeded 100 000 referrals for the first time and had increased by 19% compared to 2009 (Deloitte, 2012).

The economic impact of fraud is enormous. The Coalition Against Insurance Fraud estimates that fraud for all types of insurance costs 80 billion dollars annually, making it the second largest economic crime in the United States (Deloitte, 2012).

Participants were asked the following question: *In your opinion, can the application of modus operandi information in short-term insurance fraud investigation decrease the financial loss attributed to short-term insurance fraud?* The purpose of this question was to assess participants' knowledge on the effect of the use of MO information on the financial loss ascribed to short-term insurance fraud. The participants' responses to the question are summarised as follows:

- Sixteen participants were in agreement that the application of MO information in short-term insurance fraud investigation would significantly decrease the financial loss attributed to short-term insurance fraud. These participants emphasised that MO information would assist with early detection and can also help to implement controls to mitigate fraud risks. Some participants were of the view that early detection would lead to proactive investigation and prevention of future fraud, which would ultimately limit financial losses due to the settlement of fraudulent claims.
- In contrast to the participants mentioned in the point above, two participants were of the opinion that the application of MO information in short-term insurance fraud investigation would not decrease the financial loss attributed to short-term insurance fraud. This opinion was supported by their view that fraudsters are skilled at adapting MOs – they can therefore respond and create new opportunities for committing fraud, making detection very difficult.

In relation to the above literature on the cost of short-term insurance fraud, it appears from the participant's responses that they acknowledged the importance of applying MO information during the investigation of short-term insurance fraud.

The reasons why people commit short-term insurance fraud follow for discussion.

2.8 REASONS WHY PEOPLE COMMIT FRAUD

According to Wells (2005:13), there is no single reason why people commit fraud. Based on the research done by Donald Cressey and his theory of the fraud triangle, it is believed that fraud is likely to result of a combination of three factors, namely, motivation, opportunity and rationalisation.

- **Motivation** is based on greed or need, for example, resulting from financial difficulties.
- **Opportunity** relies on weak internal controls, poor security, and fear of exposure and detection.
- **Rationalisation** is when the actions taken are assumed necessary for the business, harmless because the victim is large enough to absorb the impact or justified because the wrongdoer feels aggrieved.

According to Kassem and Higson (2012:191), critics argue that the fraud triangle in isolation cannot explain fraud because rationalisation and pressure are factors that cannot be observed. Morley, Ball and Ormerod (2006:163) suggest that "motivations to commit fraud vary". Brinkmann and Lentz (2006:322) explain that opportunistic individuals may perceive insurance fraud as being a victimless crime and would therefore indulge in submitting a fraudulent claim as a means of recovering their premiums.

Tennyson (1997 & 2002; as quoted by Su & Tseng, 2013:38) found that the following factors influence the client's intention to commit fraud:

- the client's perceptions towards insurance companies;
- the relationship that exists between the client and insurer;
- the client's insurance experience; and
- the client's tolerance for insurance fraud

Criminal networks, on the other hand, may use fraud as a regular source to generate an income. Financial crime has accelerated over time due to the quantity and complexity of the tools available, cheap and user-friendly technology, and perpetual innovation (Nardo, 2004:139).

Silverstone, Sheetz, Pedneault and Rudewicz (2012:32) explain that society perceives fraud to be a victimless crime, and that governments and businesses are so wealthy that the money taken fraudulently will not be missed. It is also perceived that fraud is an easy way to get money without receiving severe punishment. From the researcher's experience during investigation, information received from perpetrators reveals that the first attempt is generally motivated by need due to some sort of financial pressure, for example, medical bills, school fees, gambling or drug addiction. Explanations regarding the continuation include loopholes identified which made it easy, stupidity, thinking that they would not be caught out, trying to maintain a lifestyle and greed.

The factors influencing the increase of short-term insurance fraud follow for discussion.

2.9 FACTORS INFLUENCING THE INCREASE OF SHORT-TERM INSURANCE FRAUD

Corporate fraud is steadfast, forming a worldwide challenge for senior management and board members. Poorly designed internal controls are deemed to be weak and are not obeyed by employees (KPMG, 2016:10). Morley et al. (2006:167) raise concern that the modern wave of technological and process solutions seems to have been developed without a full understanding of claims handling and investigation staff within the insurance industry. These systems focus upon identifying irregularities, with the repercussion that claims handling staff are not themselves good at spotting anomalies in claims data.

This view is supported by Ellis and Gildenhuis (2002:31), who explain that quantities of intelligence and sophisticated investigative tools remain just that and emphasise that "there is no substitute for the human mind, supported by proper training and experience". These authors further confirm that technology can fast-track an investigation, but nothing can replace "gut feel" combined with physical interaction of witnesses and evidence. Bologna and Shaw (1997:2) emphasise the fact that fraud is most likely to occur in environments where motives,

opportunities, means and methods flourish. Bologna and Shaw believe that the following conditions offer exposure of risk for fraud to occur:

- Internal controls are absent, weak or loosely enforced.
- Employees are hired without due consideration for their honesty and integrity.
- Employees are poorly managed, exploited, abused or placed under great stress to accomplish financial goals and objectives.
- Management models are themselves corrupt, inefficient or incompetent.
- There are employees with financial problems, such as alcoholism, drug abuse, gambling or expensive tastes.
- A history or tradition of corruption exists within the environment.
- The company has fallen on hard times and is losing money.
- Internal audit and security resources are inadequate.

According to Rose (2008:2), many insurers are of the opinion that it is too expensive to detect fraud and it has therefore become an accepted norm that a certain amount of fraud loss is a standard cost of doing business. There is an increased focus on customer satisfaction with a reluctance to stall claims for further investigation. Rose emphasises that insurance companies operate data systems in “silos”, making it very difficult for companies to identify separate entities that are operating in collusion or even identifying patterns that would only be suspicious when taking all information into account.

Participants were asked the following question: *In your opinion, can modus operandi information play a role in identifying irregularities in short-term insurance claims?* The purpose of this question was to test participants’ knowledge in the application of MO information with the aim of identifying irregularities pertaining to short-term insurance claims.

All the participants agreed that MO information played a role in identifying irregularities of short-term insurance claims. The participants provided the following reasons in support of their view:

- MO information can be integrated into underwriting and claims processes, which will help to underwrite new policies properly and segment and flag high-risk claims.
- The more information is collected on MO, the easier it is to identify irregularities and trends, for example, dishonest claims.
- If data are captured correctly, shared amongst the industry role players and compared accurately, irregularities can be highlighted at policy acceptance stage.
- Fraudsters learn from each other; therefore, MO information is valuable in detecting future fraudulent claims.

In relation to the above literature on factors influencing the increase of short-term insurance fraud, it appears from the participants' responses that they were of the view that MO information plays an important role in identifying irregularities of short-term insurance claims.

The following are reasons why insurance fraud is increasing so drastically (Coalition Against Insurance Fraud, [s.a]):

- Some insurance companies unconsciously encourage fraud by settling suspicious claims easily. They believe that it is cheaper to pay the claim than to fight it in court or to face lawsuits due to bad faith.
- Some policyholders believe that insurance fraud is a low-risk crime with a high financial benefit in comparison to crimes such as armed robbery or drug trafficking.
- Investigating officers do not understand the short-term insurance industry and it is therefore difficult for them to investigate cases pertaining to insurance fraud.
- Prosecutors give priority to more serious crimes and sometimes believe that insurance crimes are too complex and technical to successfully prosecute.
- People tend to have a tolerance for insurance fraud and many policyholders believe that insurance fraud is justified.

An overview on the profile of an insurance fraudster is discussed in the subsequent section.

2.10 THE PROFILE OF AN INSURANCE FRAUDSTER

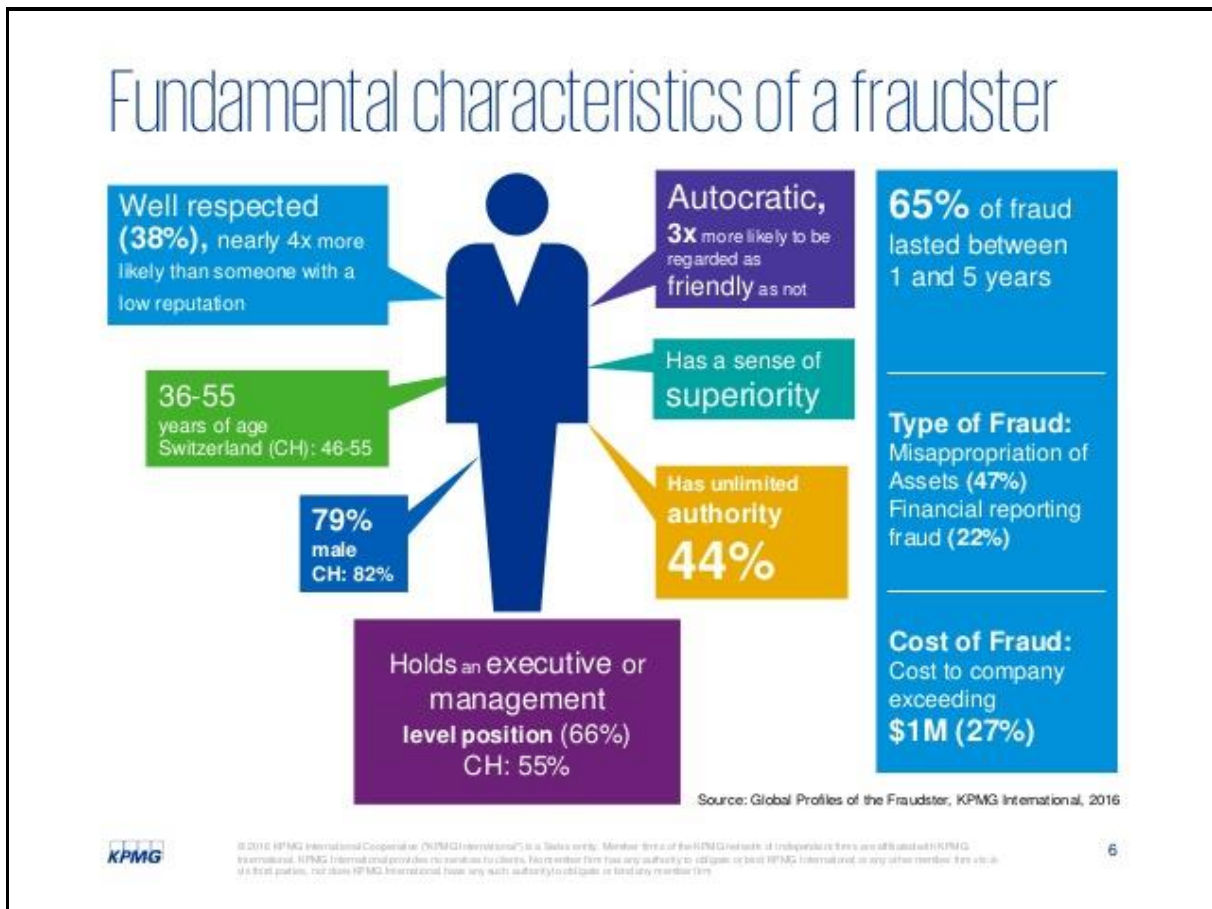
According to Bekerian and Jackson (1997:2) offender profiling, criminal personality profiling and specific profile analysis are terms that are used to define the same technique, the basic perception remains the same. Study of the behaviour demonstrated at the crime scene or a series of similar crimes allows inferences to be made about the possible offender.

Clarke (as quoted by Morley et al., 2006:163) explains there are also several types of fraudsters. These include “the opportunist”, “the amateur” and “the professional”.

- **The opportunist** is the type of fraudster who would normally take advantage of a genuine loss, for example, by claiming for additional items that were not stolen during a burglary.
- **The amateur** refers to the fraudster who would indulge in opportunistic fraud, for example, submitting a claim for stolen items resulting from a burglary that did not even occur.
- **The professional** is the most serious of the fraudsters and would engage in systematic frauds individually or as part of a syndicate.

A worldwide survey conducted by KPMG (2016:7) revealed that the perpetrator of fraud is normally a man aged between 36 and 55, employed at the victim organisation, with more than six years of service, who has an executive position in operations, finance or general management. This statement is supported by Crumbley, Heitger and Smith (2011:3071), who point out that a study conducted by Ernst & Young of leading companies and public bodies in 32 countries found that more than 50% have been victims of fraud, with 84% of total losses being attributed to staff and 50% of larger, more serious, fraud being committed by the organisation’s own management. According to Sutherland (1949:189) high levels of fraud committed by management is attributed to the fact that they are placed in positions of trust and are given more authority than middle management and junior staff in respect of certain decisions, payments and so on. This is seen as a loophole as there is generally no or poor oversight in respect of their functions.

Figure 2.3: Fundamental characteristics of a fraudster



(KPMG, 2016:6)

In this regard the participants were first asked the following question: *According to you, can modus operandi information be used to profile a short-term insurance fraudster?* The purpose of this question was to understand participants' views on whether the profile of a short-term insurance fraudster could be influenced by MO information. The participants' responses to the question are summarised as follows:

- Fifteen participants agreed that MO information could be used to profile a short-term insurance fraudster.
- Seven participants were of the view that, if detailed MO information was obtained, a fraudster could be profiled according to various elements, such as age, gender, geographic area, ethnic group, employment and qualification.

- Three participants stated that profiling a fraudster could be very beneficial, as information could be shared throughout the short-term insurance industry, which could result in the fraudster being blacklisted.
- Another participant was of the opinion that it would be very difficult to profile a fraudster using MO information in an instance where a stolen identity is used.
- One participant pointed out that MO information could assist to identify variables of a potential fraudster, for instance:
 - abrupt tone of voice;
 - not talking for lengthy periods of time;
 - being from a certain area;
 - using a common bank account; and
 - making calls from a common cell phone number.
- In contrast to the participants mentioned above, one participant did not agree that MO information could be used to profile a short-term insurance fraudster. His view was supported by the fact that fraudsters are skilled and, when detected, they tend to use different identities and even change their pattern of behaviour.

Secondly, participants were asked the following question: *According to you, can modus operandi information assist to identify fraudsters?* The purpose of this question was to establish whether MO information assisted participants to identify fraudsters. In summary, the participants responded to the questions as follows:

- Ten participants were of the opinion that MO information was very useful and, if used effectively, it could identify crime trends and fraudsters as they generally use the same methods to commit fraud.
- Three participants were of the view that, with the use of a database, MO information could be used during underwriting and claims processing to link policies to fraudsters and syndicates.
- Four participants emphasised the importance of detailed and complete MO-related information to assist in enhancing controls within the organisation and preventing similar future occurrences.

- In contrast to the other participants, one participant was of the opinion that both behavioural and transactional MO needed to be considered when trying to identify fraudsters.

In relation to the above literature on the profile of a short-term insurance fraudster, it appears from the participants' responses that they strongly supported the importance of MO information in aiding to profile a short-term insurance fraudster and agree that MO information has tremendous value in assisting to identify fraudsters.

The impact of short-term insurance fraud follows for discussion.

2.11 THE IMPACT OF SHORT-TERM INSURANCE FRAUD

Babalola and Yusuf (2009:420) state that the cost of insurance is increased due to fraud. Fraud also threatens the financial stability of insurers and negatively impacts the convenience of insurance. Individuals that are dishonest and submit fraudulent claims are a serious problem for the insurance industry and for society. Insurance fraud is pervasive and costly. Policyholders are negatively impacted by this and are the ultimate group that pay for these crimes through increased premiums (Tseng, 2016:353).

The key priority for insurers is to effectively detect and reduce insurance fraud. Insurance fraud has serious consequences for those found guilty of committing fraud as well as honest policyholders who have to pay higher premiums due to the actions of these fraudsters. Insurance fraud can therefore not be regarded as a victimless crime. The cost of investigating suspected fraud has an impact on the insurance premiums charged. Investigations also result in time delays, not allowing the insurer to settle a genuine claim quickly. Recent studies have also pointed out that insurance fraud funds and facilitates other serious crime (Insurance Europe, 2013:17).

Insurance fraud has more severe consequences beyond the associated monetary losses (Dearden, 2016:88). The effects infiltrate throughout society. Large corporates suffer reputational damage, while small- and medium-sized businesses risk going out of business, affecting owners, employees and their families, and damaging the country's economy. Some victims have been known to suffer emotional trauma and even commit suicide (Dearden, 2016:88).

Remedies to curb insurance fraud follow for discussion.

2.12 REMEDIES TO CURB INSURANCE FRAUD

According to the researcher, fraud investigations often originate after an allegation is received from an anonymous tip-off. This is generally received from inside the organisation, although external tip-offs are not unusual. Many fraud incidents are initially discovered by accident, perhaps as result of an audit, job change, resignation, or a staff member being on leave or booked off sick. Fraud is seldom discovered deliberately, as not enough emphasis is placed on the implementation of proactive fraud detection programmes.

According to Lees (2012: 9-11), key techniques for detecting and preventing fraud include:

- developing a sound ethical culture;
- periodically assessing fraud risk;
- fraud risk training and awareness;
- reporting mechanisms and whistle-blowing; and
- sound internal control systems.

Technology plays a vital role in fraud prevention, but the majority of insurers agree that no single technology is adequate. A combination of techniques, methods and skills is required to detect both opportunistic and organised fraud. Automated red flags are the first line of defence employed by most insurers (Coalition Against Insurance Fraud, 2014:2). The researcher states that insurers have implemented various solutions, including, amongst others, the establishment of in-house investigation teams to conduct merit assessments and investigate fraud, modifying policy conditions to include forfeiture clauses in case the claim is fraudulent, using predictive analytics software to identify potential fraudulent claims, and establishing industry bodies to ensure that there is a platform to share information.

The following techniques are commonly used to prevent and detect fraud in the insurance industry:

- Rules and red flags are used to identify specific patterns and highlight activities that look suspicious.

- Data collectively obtained with the support of other database subscribers broaden information in claims investigations.
- Anomalies that exceed the norm and threshold for a particular claim's benchmark are reported.
- Large volumes of adjudicated claims are examined to find discrepancies.
- Predictive modelling – data mining tools are used to build models to produce fraud-propensity scores, rules and red flags.
- Layered voice analysis is used to identify stress levels in claimant interviews.

Participants were asked the following question: *Do you apply modus operandi information as a key technique for detecting and preventing short-term insurance fraud?* The purpose of this question was to determine whether participants used MO information to detect and prevent short-term insurance fraud.

All 18 participants stated that they applied MO information as a technique during the investigation of short-term insurance fraud. Eight participants elaborated and provided the following reasons for their answer:

- Four participants indicated that link analysis was used to identify patterns and link claims if similar scenarios were picked up.
- One participant specified that MO information was integrated into claims processes to segment claims from low- to high-risk, aiding in detecting and preventing short-term insurance fraud.
- Another participant was of the opinion that the effective use of MO during investigations was solely based on the expertise of the investigator to conduct a thorough investigation by doing the necessary checks to uncover crime patterns involving various claims and policies.
- In contrast to this, one participant pointed out that the use of MO information during investigations could be improved and enhanced. He stated that there was a reluctance to share information, which impeded the true success that this technique could offer.

- Another participant confirmed that, when fraudsters were identified by MO information, their details were flagged on the system, preventing them from returning to submit more fraudulent claims.

In relation to the above literature on remedies to curb insurance fraud, it is evident from the feedback received from the participants to the abovementioned question that these participants had identified the value of applying MO as a key technique during the investigation of short-term insurance fraud, as well as the problems restricting the efficient use of MO information.

2.13 SUMMARY

Insurance fraud is a global epidemic that harms corporate reputations, costs the insurance industry millions and ruins lives. It is a heavy financial and moral burden on society. Effective use of MO information can assist in identifying criminal activity across the insurance industry. Collective efforts, skills and knowledge-sharing, in conjunction with the optimal use of available data systems, will aid in proactive insurance fraud detection. Identifying and investigating crime rings or syndicates will have a positive impact on the reduction of insurance fraud.

The factors influencing MO as well as the value of MO when used to link cases were discussed in this chapter. The chapter also included the purpose of insurance and the impact of insurance fraud. The experience of the researcher was illustrated by case studies about substantiation of insurance fraud, profiles of a fraudster and measures taken to combat insurance fraud.

Chapter 3 provides an overview of Chapter 1 and Chapter 2, and includes findings and recommendations identified from the interviews.

CHAPTER 3 FINDINGS AND RECOMMENDATIONS

3.1 INTRODUCTION

This chapter summarises Chapter 1 and Chapter 2, the overview of literature and the experience of the researcher in the field of short-term insurance fraud investigation, after which relevant findings and recommendations are presented based on the outcome of the interviews discussed in Chapter 2. The reason to conduct research on this topic was to enhance the knowledge of forensic investigators at Santam and MiWay with regard to the value of applying MO information as an important investigative tool during the investigation of short-term insurance fraud.

The primary purpose of this study was to discover, identify and emphasise the value of the application of MO information as a forensic investigation method in order to determine the significance of this method in the investigation of short-term insurance fraud at forensic departments across all insurers.

The secondary purpose of this research was to provide well-researched and realistic information to forensic investigators to indicate that MO should be efficiently used as a tool that could add value to short-term insurance fraud investigations.

The research conducted stresses the impact of insurance fraud internationally and within the South African short-term insurance industry, and highlights the importance of using MO information during investigations to reduce losses attributed to short-term insurance fraud. Over the years, MO has been successfully utilised by investigators globally to identify serial offenders and link multiple cases. The researcher is therefore of the opinion that, if applied effectively, it could significantly decrease short-term insurance fraud.

The research question, namely, *What is the value of applying modus operandi information as a forensic investigation method in the investigation of short-term insurance fraud?* allowed the researcher to concentrate on the identified problem and make certain that the findings and recommendations of the study relate to the research problem. The findings of this study relate directly to the questions asked during the interviews.

3.2 FINDINGS

The following findings are based on the information obtained from the literature study, the researcher's broad experience as a forensic investigator and the interviews with the participants.

3.2.1 Findings on the investigation of insurance fraud

- Research has identified insurance fraud to be a fundamental challenge as it has become a global epidemic that is estimated to cost the short-term insurance industry billions annually.
- The actual loss attributed to insurance fraud is difficult to measure as so much goes undetected, yet the impact is known to be substantial.
- Research confirms that no recent surveys have been conducted in South Africa to measure the true extent of losses suffered by short-term insurers due to fraud.
- Innocent policyholders fall victim to paying higher monthly premiums due to the impact of insurance fraud.
- Fraudsters and criminal groups keep abreast of the latest trends and technology, are skilled at adapting their MO and can therefore respond and create new opportunities for committing fraud, making detection very difficult.
- The majority of the participants confirmed use of an internal database as well as making use of the ICB to channel enquiries, as well as verify and share information with other short-term insurers in the industry as a combined effort to detect and prevent insurance fraud.
- Data analysis can be restrictive as it is limited to the company database and the quality of the data captured. Although the ICB assists with sharing information across the short-term insurance industry, this information is still not comprehensive as not all short-term insurers are members of the ICB.
- Data analysis can be a challenge due to multiple systems being used by the insurer and its subsidiaries which are not integrated. This is found mostly in historical businesses and, as a result, the sharing of such data is restricted.

- There is difficulty in linking systems with other insurers due to different operating technology, and interaction with the ICB takes time as there is an absence of a direct automated process linking to other insurers.
- Short-term insurers work in silos and seldom share MO information. There is a need for more concerted efforts between insurers to share information that will assist in identifying trends. The reluctance of short-term insurers to share MO information, due to legislation, impedes the true success that the MO technique can offer.
- Not all short-term insurers report criminal cases to the authorities, due to various reasons such as reputational damage, the fraudulent amount vs. costs and resources involved, and the belief that insurance fraud is not seen as a priority crime by the SAPS and National Prosecuting Authority.
- Tolerance for fraud is a contributing factor that increases criminal activity as well as fraud within the short-term insurance industry. This is compounded by the fact that the authorities do not have sufficient knowledge, skills and resources to deal with insurance fraud.
- Short-term insurance fraud, which includes opportunistic or professional fraud relating to false and inflated claims, is committed by four categories of perpetrators, namely, clients, brokers, suppliers and employees.
- The majority of the participants were of the opinion that the absence of processes and controls or weak processes and controls within the environment created loopholes that influenced a short-term insurance fraudster's MO.
- Research confirms that a short-term insurance fraudster's MO is influenced by opportunity, financial pressure and rationalisation.
- Most short-term insurers and financial institutions are constantly looking for innovative ways to try to detect, prevent and respond to insurance fraud.

3.2.2 Findings on the application of modus operandi in insurance fraud investigations

- All the participants agreed that there was definite value in applying MO information as a forensic investigation method during the investigation of short-term insurance fraud.

- Collated MO information assists in detecting control breakdowns in the underwriting, claims, broker and service provider environments, and helps develop effective controls to prevent fraud.
- MO is a specialised investigative tool that requires skilled staff, proper training, understanding, determination and endurance.
- Participants agreed that the use of MO could identify patterns and link various claims to the same individual or group of individuals.
- Although there are databases that are currently used by the short-term insurance industry to capture certain information and link individuals to common bank account numbers, identity numbers, registration numbers, cell phone numbers and addresses, there is no system that can accurately track and link fraudulent claims or organised groups based on specific MO information.
- Linking claims or fraudsters using MO information can sometimes become challenging as different staff members work with various claims and clients, and information is usually only shared during meetings and networking sessions.
- Knowledge, experience, training and skill are important factors in identifying MO during investigations. MO identification makes the investigation process easier and reduces turnaround times in resolving investigations.
- Proper investigation and collection of MO information enables forensic investigators to conduct more comprehensive interviews.
- The application of MO information enables the identification of all transactions, allowing more comprehensive investigations to be carried out.
- MO assists in detecting more fraudulent claims than initially reported and the intelligence can be used to identify crime patterns.
- MO information circulated via the ICB allows for the successful identification of syndicates targeting various insurers, which also prevents insurers from paying false claims.

- Research has confirmed that MO information plays an important role in identifying irregularities in short-term insurance claims.
- Some participants confirmed that records were kept of MO information pertaining to short-term insurance fraud. Information was stored in their internal database and shared with the ICB.
- Other participants indicated that, although records were kept of information, it was either captured on a case management system, on spreadsheets or in the form of working papers, and that no formal records containing accurate MO information were available. Additionally, these records were not freely available to other insurers as they were bound by confidentiality.
- Both behavioural and transactional MO need to be considered when trying to identify fraudsters. MO information is very useful and, if used effectively, it can identify crime trends and fraudsters as they generally use the same methods to commit fraud.
- The application of MO information in short-term insurance fraud investigation will significantly decrease the financial loss attributed to short-term insurance fraud and, ultimately, feed back to the policyholder as premium increases would be managed.
- MO information will assist with early detection and can also help to implement controls to mitigate fraud risks, which will lead to proactive investigation and prevention of fraud.
- MO information can assist in identifying variables of a potential fraudster, for example, abrupt tone of voice, not talking for lengthy periods of time, being from a certain area, or using a common bank account, telephone number, fax number or email address.
- Detailed MO information can be used to profile a fraudster according to various elements, for example, age, gender, geographic area, ethnic group, employment and qualification.
- Profiling a fraudster based on MO can be beneficial as information can be shared throughout the short-term insurance industry, which can result in fraudsters being identified, investigated and blacklisted.

- The effective use of MO as a tool during investigations is based on the expertise of the investigator to conduct a thorough investigation by doing the necessary checks to uncover crime patterns involving various claims and policies.
- Some forensic investigators deal with investigations on a case-to-case basis and fail to conduct additional checks and trace fraudsters. In such cases, the details of the fraudster are not captured on the database, making it impossible to identify other links.
- The use of MO as an investigative tool can be improved and enhanced by the forensic investigators at both Santam and MiWay.

3.3 RECOMMENDATIONS

Based on the findings of the research, the following recommendations are made:

3.3.1 Recommendations on the investigation of insurance fraud

- There must be collaboration. All divisions of the private sector must work together by sharing intelligence on fraudsters, developing cross-cutting capabilities, initiating joint projects and using data analytics.
- All short-term insurers should adopt a zero-tolerance attitude towards insurance fraud by reporting criminal cases against fraudsters who submit fraudulent claims as a preventive measure, regardless of whether it is an actual or potential loss that is suffered by the insurer.
- Fraudsters should be “named and shamed”. This will serve as a good deterrence mechanism for those thinking of committing fraud.
- Information pertaining to MO should be included in fraud awareness training sessions, as it is of vital importance that staff are made aware of fraud trends and syndicated operations involving the same MO.
- Insurance companies should implement proper vetting processes in respect of clients, suppliers, brokers and staff to ensure the recruitment of trustworthy and ethical business partners, policyholders and employees.

- Continuous communication and knowledge-sharing amongst forensic departments at various insurers are critical for detecting and efficiently investigating suspicious activity that may involve organised crime by establishing better networking platforms for investigators.
- The implementation of robust systems and proper processes will discourage fraudsters from attempting to submit fraudulent claims.
- Forensic investigators need to refrain from working in silos and dealing with investigations on a case-to-case basis, but should instead spend time and resources on sharing crime information, linking cases and looking for clusters of criminal activity involving the same MO.
- In order to maintain effective databases, investigators need to feed the database by providing pertinent information that can be used to identify fraud trends and the MO used by perpetrators so that all entities can benefit and contribute to the fight against short-term insurance fraud.
- An ICB-supported centralised platform where all investigators have access to search and add to a database could effectively contribute to detecting and preventing insurance fraud on a larger scale.

3.3.2 Recommendations on the application of modus operandi in insurance fraud investigations

- Insurance companies should create a human risk database, identifying and listing clients that either committed fraud or are a moral risk, preventing them from moving to another insurer and committing the same offence.
- Employees identified as fraud-reporting champions in the insurance industry should be utilised as mentors and training facilitators to the rest of their colleagues in the application of MO to identify and report incidents of fraud.
- The use of MO as an investigative tool in the insurance industry should become a standard way of working, resulting in an instrumental service in the collection of data to be shared throughout the insurance industry.

- International research on MO within the insurance sector should be studied and examined, this knowledge can be used in South Africa to identify similar trends and implement preventative measures.
- Forensic investigators at Santam and MiWay should be trained in basic application of MO during their investigations. They should also be educated about the value that MO information could add to linking cases and identifying syndicates.
- More concerted efforts should be made by short-term insurers to provide comprehensive information in order to effectively identify MO patterns. The more information is collected on MO, the easier it is to identify irregularities and trends, for example, dishonest claims.
- Forensic investigators need to have a proper understanding of the subject and criminals' behaviour in order to identify MO patterns.
- The implementation of a database containing MO information can be used during underwriting and claims processing to identify and link policies and claims to fraudsters and syndicates.
- Insurers should note the importance of capturing detailed and complete MO-related information to assist in enhancing controls within the organisation and preventing fraud from occurring.
- MO information can be integrated into underwriting and claims processes, which will help to underwrite new policies properly and segment and flag high-risk claims.
- If data are captured correctly and shared amongst the industry role players, fraudsters can be identified and irregularities can be highlighted at policy acceptance stage.
- Once fraudsters become aware of the unique identifier that will be used to expose them, they learn from each other, adapt fast or upskill themselves so that they remain undetected. Therefore, MO information is very valuable in detecting future fraudulent claims.
- The researcher recommends the following MO matrix (as per Table 3.1 below) applicable to short-term insurance claims should be implemented and completed when

investigating a cluster of similar claims. Once a data set is completed, the matrix should be stored electronically and be accessible to all forensic investigators working in the department.

Table 3.1: Short-term insurance fraud modus operandi matrix

INFORMATION	Incident 1	Incident 2	Incident 3
Policy number			
Company name			
Policy holder			
Co-insured			
ID number			
Postal address			
Address			
Contact number – landline			
Contact number – cell phone			
Email address			
Bank account – debit order			
Bank account – claims payment			
Inception date			
Item inception date			
Cancellation date			
Claim number			
Date of claims report			
Date and time of loss			
Description of loss			
Scene of incident			
Item description			
Registration/serial number			
Ownership information			
Driver information			
A/R number			
O/b number			
CAS number			
Method of communication			
Quotes – supplier details			
Quotes – number			
Invoice – supplier details			
Invoice – number			
Proof of ownership			
Towing operator’s details			
Third-party details			
Finance House info			
Panel beater			
Assessor			
Broker details			
Witness details			
Settlement – repair, replace, cash			
Duplicate insurance			
Other			

3.4 CONCLUSION

The research design and methodology applied in this study allowed the researcher to adequately address the research aim, purpose of the research and the research question: *What is the value of applying modus operandi information as a forensic investigation method in the investigation of short-term insurance fraud?* The researcher examined the value of MO information in the investigation of short-term insurance fraud; this was illustrated by means of a comprehensive literature review, which was supplemented by the integration of empirical evidence obtained from semi-structured interviews.

MO has been successfully utilised globally as an investigative tool to link cases and identify common perpetrators responsible for committing crimes such as housebreaking, rape and murder. To increase the success of short-term insurance fraud investigations and decrease the financial losses attributed to fraud suffered by the short-term insurance industry, it is extremely important for forensic investigators to familiarise themselves with the benefits of effectively using MO information during the investigation of short-term insurance fraud.

This study should be able to persuade the short-term insurance industry that the application of MO information as a forensic investigation method will be extremely valuable in detecting, preventing and responding to incidents of fraud. Should the relevant role players consider the implementation of the recommendations made in this study, the value and benefits of MO information in fraud investigations could be measured amongst all short-term insurers. The researcher has dedicated about 16 years of her life to investigation and from experience is convinced that MO is a very valuable investigation tool in addressing short-term insurance fraud.

LIST OF REFERENCES

- Adderley, R. & Musgrove, P. 2003. Modus operandi modelling of group offending: A data-mining case study. *International Journal of Police Science and Management*, 5(4):265-276.
- Anderson, A.M., Dodd, A. & Roos, M.C. 2006. *Everyone's guide to South African law*. 2nd edition. Cape Town: Zebra.
- Association of Certified Fraud Examiners. 2012. *Fraud examiners manual*. Austin, Tex.: ACFE.
- Association of Certified Fraud Examiners. 2014. *Report to the nations on occupational fraud and abuse*. From: http://www.acfe.com/uploadedFiles/ACFE_Website/Content/rtnn/2014-report-to-nations.pdf (accessed 10 September 2018).
- Babalola, A.R. & Yusuf, T.O. 2009. Control of insurance fraud in Nigeria: An exploratory study (case study). *Journal of Financial Crime*, 16(4):418-435.
- Babbie, E. 2010. *The practice of social research*. 12th edition. Boston, Mass.: Wadsworth Cengage Learning.
- Babbie, E. 2011. *Introduction to social research*. 5th edition. Boston, Mass.: Wadsworth Cengage Learning.
- Babbie, E. & Mouton, J. 2011. *The practice of social research*. Cape Town: Oxford University Press.
- Bartol, C.R. & Bartol, A.M. 2013. *Criminal and behavioral profiling*. Los Angeles, Calif.: Sage.
- Bekerian, D.A. & Jackson, J.L. 1997. *Offender Profiling, Theory, Research and Practice*. West Sussex, England: John Wiley & Sons Ltd.
- Bennett, W.W. & Hess, K.M. 2004. *Criminal investigation*. 7th edition. Toronto: Wadsworth.
- Bland, D.E. 1999. Risk management in insurance. *Journal of Financial Regulation and Compliance*, 7(1):13-16.

- Bologna, J. & Shaw, P. 1997. *Corporate crime investigation*. Boston, Mass.: Butterworth-Heinemann.
- Brinkmann, J. & Lentz, P. 2006. Understanding insurance customer dishonesty: outline of a situational approach. *Journal of Business Ethics*, 66 (2/3): 177-195.
- Brooks, G., Button, M., Lewis, C. & Shepherd, D. 2015. Fraud in overseas aid and the challenge of measurement. *Journal of Financial Crime*, 22(2):184-198.
- Buthlezi, L. 2013. Desperate times see insurance fraud rise. *Independent Online*, 8 November. From: <https://www.iol.co.za/business-report/companies/desperate-times-see-insurance-fraud-rise-1603987> (accessed 10 September 2018).
- Canter, D.V. (2004) Offender profiling and investigative psychology. *Journal of Investigative Psychology and Offender Profiling* 1(1): 1-15
- Chetty, J. 2014. *Myths about data investigation*. SlideShare. From: <https://www.slideshare.net/SaratogaPresents/jerry-chetty-myth-about-data-investigation> (accessed 10 September 2018).
- Coalition Against Insurance Fraud. [s.a.] *Insurance fraud: The crime you pay for*. From: http://www.preinsuranceinspection.org/pdf/pb4_infraud.pdf (accessed 10 September 2018).
- Coalition Against Insurance Fraud. 2014. *The state of insurance fraud technology*. From: http://www.insurancefraud.org/downloads/technology_study-2014.pdf (accessed 10 September 2018).
- College of Policing. 2017. *Investigation*. From: <https://www.app.college.police.uk/app-content/investigations/introduction/> (accessed 10 September 2018).
- Cordner, G.W. & Scarborough, K.E. 2010. *Police administration*. 7th edition. Cincinnati, OH: Anderson.
- Creswell, J.W. 1994. *Research design: Qualitative and quantitative approaches*. Thousand Oaks, Calif.: Sage.

- Creswell, J.W. 2014. *Research design: Qualitative, quantitative and mixed methods approaches*. 4th edition. London: Sage.
- Crumbley, D.L., Heitger, L.E. & Smith, G.S. 2011. *Forensic and investigative accounting*. 5th edition. Chicago, Ill.: CCH.
- Dalko, V. 2017. Unsafe insurance. *Journal of Financial Crime*, 24(4):643-655.
- De Vos, A.S., Strydom, H., Fouché, C.B., Poggenpoel, M. & Schurink, E.W. 1998. *Research at grass roots: A primer for the caring professions*. Pretoria: Van Schaik.
- Dearden, T.E. 2016. Trust: The unwritten cost of white-collar crime. *Journal of Financial Crime*, 23(1):87-101.
- Deloitte. 2012. *A call to action: Identifying strategies to win the war against insurance claims fraud*. From: <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/financial-services/us-fsi-a-call-to-action-080912.pdf> (accessed 10 September 2018).
- Dempsey, J.S. 2003. *Introduction to investigations*. 2nd edition. Toronto: Wadsworth/Thomson.
- Denscombe, M. 2002. *Ground rules for good research: A ten point guide for social researchers*. Buckingham: Open University Press.
- Du Toit, H. 2013. Santam Ltd highlights insurance fraud awareness. *FAnews*, 6 November 2013. From: <https://www.fanews.co.za/article/fraud-crime/5/general/1094/santam-highlights-insurance-fraud-awareness/14821> (accessed 10 September 2018).
- Ellis, R.C. & Gildenhuis, S. 2002. Enhancing white-collar/commercial crime investigations using technology. *Auditing SA*, (22):27-31.
- Ernst & Young. 2011. *Fraud in insurance on rise: Survey 2010-11*. From: [https://webforms.ey.com/Publication/vwLUAssets/Fraud_in_insurance_on_rise/\\$FILE/Fraud_in_insurance.pdf](https://webforms.ey.com/Publication/vwLUAssets/Fraud_in_insurance_on_rise/$FILE/Fraud_in_insurance.pdf) (accessed 10 September 2018).
- Gragido, W. & Pirc, J. 2011. *Cybercrime and espionage: An analysis of subversive multi-vector threats*. St Louis, Mo.: Elsevier.

- Grant, E. 2012. *The social and economic value of insurance*. Geneva/Basel: The Geneva Association. From: https://www.genevaassociation.org/sites/default/files/research-topics-document-type/pdf_public/ga2012-the_social_and_economic_value_of_insurance.pdf (accessed 10 September 2018).
- Hartley, D. 2018. *Using technology to identify, track and combat syndicated crime*. SAS. From: <https://www.saicb.co.za/uploads/files/03.-David-Hartley-SAS.pdf> (accessed 10 September 2018).
- Hollin, C.R. 2013. *Psychology and crime: An introduction to criminological psychology*. 2nd edition. London: Routledge.
- Hoppe, K. 2012. The social and economic value of insurance. Paper delivered at the RIAD Congress (7-8 November 2013: Cannes).
- Insurance Crime Bureau. 2017. *2017 annual report*. From: <https://www.saicb.co.za/uploads/files/The-Insurance-Crime-Bureau-2017-Annual-Report.pdf> (accessed 15 May 2018).
- Insurance Europe. 2013. *The impact of insurance fraud*. From: <https://www.insuranceeurope.eu/sites/default/files/attachments/The%20impact%20of%20insurance%20fraud.pdf> (accessed 10 September 2018).
- James, S.H. & Nordby, J.J. 2003. *Forensic science: An introduction to scientific and investigative techniques*. Boca Raton, Fla: CRC.
- James, S.H. & Nordby, J.J. 2005. *Forensic science: An introduction to scientific and investigative techniques*. 2nd edition. Boca Raton, Fla: CRC.
- Joubert, C. 2001. *Applied law for police officials*. Landsdowne: Juta.
- Kassem, R. & Higson, A. 2012. The new fraud triangle model. *Journal of Emerging Trends in Economics and Management Sciences*, 3(3):191-195.
- Kopel, S. 2012. *Guide to business law: Commercial law*. 5th edition. Cape Town: Oxford University Press.

- KPMG. 2016. *Global profiles of the fraudster: Technology enables and weak controls fuel the fraud*. From: <https://assets.kpmg.com/content/dam/kpmg/pdf/2016/05/profiles-of-the-fraudster.pdf> (accessed 10 September 2018).
- Krige, N. 2013. Insurance fraud. *RISKSA*, June:102-111. From: https://issuu.com/cosa/docs/risksa_june_lr (accessed 12 September 2018).
- Kumar, R. 2005. *Research methodology: A step-by-step guide for beginners*. 2nd edition. London: Sage.
- Le Roux, M. & Whisgary, M. 2011. *Recession drives fraudulent claim trends*. COVER. From: <http://www.cover.co.za/short-term-insurance/recession-drives-fraudulent-claims-trends> (accessed 10 September 2018).
- Leedy, P.D. & Ormrod, J.E. 2010. *Practical research, planning and design*. 9th edition. Upper Saddle River, NJ: Pearson.
- Leedy, P.D. & Ormrod, J.E. 2013. *Practical research, planning and design*. 10th edition. Upper Saddle River, NJ: Pearson.
- Lees, G. 2012. *Fraud risk management: A guide to good practice*. Chartered Global Management Accountant. From: <https://www.cgma.org/content/dam/cgma/resources/reports/downloadabledocuments/fraudriskmanagement.pdf> (accessed 10 September 2018).
- Lesch, W.C. & Byars, B. 2008. Consumer insurance fraud in the US property-casualty industry. *Journal of Financial Crime*, 15(4):411-431.
- Marais, C.W. & Van Rooyen, H.J.N. 1990. *Crime investigation*. Silverton: Promedia.
- Marshall, C. & Rossman, G.B. 2011. *Designing qualitative research*. 5th edition. Thousand Oaks, Calif.: Sage.
- Masters, N. & Dupont, E. 2002. Insurance companies: Waking up to international standards. *Balance Sheet*, 10(3):35-38.

- Maxwell, J.A. 2013. *Qualitative research design: An interactive approach*. 3rd edition. Thousand Oaks, Calif.: Sage.
- Maxwell, J. 1997. Designing a qualitative study. In Bick, L. & Rog, D.J (eds.). *Handbook of applied social science methods*. Thousand Oaks, CA: Sage.
- Merriam-Webster dictionary*. [s.a.] s.v. “modus operandi”. From: <http://www.merriam-webster.com/dictionary/modus%20operandi> (accessed 24 September 2014).
- Morley, N.J., Ball, L.J. & Ormerod, T.C. 2006. How the detection of insurance fraud succeeds and fails. *Psychology, Crime and Law*, 12(2):163-180.
- Mouton, J. 1996. *Understanding social research*. Pretoria: Van Schaik.
- Nardo, M. 2004. Mapping the trails of financial crime. *Journal of Financial Crime*, 12(2):139-143.
- O’Connel, J. & Soderman, H. 1936. *Modern Criminal Investigation*. New York: Funk & Wagnalls.
- Okura, M. 2013. The relationship between moral hazard and insurance fraud. *The Journal of Risk Finance*, 14(2):120-128.
- Osborne, D.A. & Wernicke, S.C. 2003. *Introduction to crime analysis: Basic resources for criminal justice practice*. Binghamton, NY: Haworth.
- Osterburg, J.W. 1968. The investigative process. *Journal of Criminal Law and Criminology*, 59(1):152-158.
- Osterburg, J.W. & Ward, R.H. 2010. *Criminal investigation: A method for reconstructing the past*. 6th edition. Newark, NJ: LexisNexis.
- PricewaterhouseCoopers. 2011. *Cybercrime in the spotlight: 6th PwC Global Economic Crime Survey*. South African edition. From: <https://www.pwc.co.za/en/assets/pdf/global-economic-crime-survey-2011.pdf> (accessed 10 September 2018).

- Punch, K.F. 2014. *Introduction to social research, quantitative and qualitative approaches*. 3rd edition. London: Sage.
- Rejda, G.E. & McNamara, M.J. 2014. *Principles of risk management and insurance*. 12th edition. Harlow: Pearson Education.
- Rose, S. 2008. *Combating insurance claims fraud: How to recognize and reduce opportunistic and organized claims fraud*. SAS. From: https://www.sas.com/content/dam/SAS/bp_de/doc/whitepaper1/ri-wp-combating-insurance-claims-fraud-1925585.pdf (accessed 10 September 2018).
- Santam. 2012. *Annual report: Sustainability report*. Cape Town: Santam.
- Santam. 2013. *Annual report: Integrated report*. Cape Town: Santam.
- Santam. 2014. *Annual report: Forensic services statistical overview*. Cape Town: Santam.
- Santam. 2017. *Annual report: Forensic services statistical overview*. Cape Town: Santam.
- Santos, R.B. 2013. *Crime analysis with crime mapping*. 3rd edition. Los Angeles, Calif.: Sage.
- Sennewald, C.A. & Tsukayama, J.K. 2001. *The process of investigation: Concepts and strategies for investigators in the private sector*. 2nd edition. Boston, Mass.: Butterworth-Heinemann.
- Silverman, D. 2013. *Doing qualitative research*. 4th edition. London: Sage.
- Silverstone, H., Sheetz, M., Pedneault, S. & Rudewicz, F. 2012. *Forensic accounting and fraud investigation for non-experts*. 3rd edition. Hoboken, NJ: Wiley.
- Skipper, H.D. 1997. *Foreign insurers in emerging markets: Issues and concerns*. International Insurance Foundation. From: https://www.researchgate.net/profile/Harold_Skipper/publication/241199392_Foreign_Insurers_in_Emerging_Markets_Issues_and_Concerns/links/0deec5304a54e2582a000000/Foreign-Insurers-in-Emerging-Markets-Issues-and-Concerns.pdf (accessed 10 September 2018).

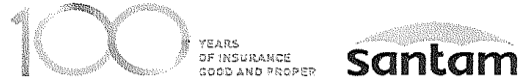
- Su, W. & Tseng, L. 2013. Customer orientation, social consensus and insurance salespeople's tolerance of customer insurance frauds. *International Journal of Bank Marketing*, 31(1):38-55.
- Sutherland EH (1949) *White Collar Crime*. New York: Dryden.
- Tseng, L. 2016. The link between guanxi and customer-salesperson collusion: The case of Taiwan's insurance industry. *International Journal of Conflict Management*, 27(3):353-378.
- Tupman, B. 1998. *The use of criminological data in police and judicial investigation*. University of Exeter. From: <https://people.exeter.ac.uk/watupman/papers/crimda.html> (accessed 10 September 2018).
- Turvey, B. 2002. *Criminal profiling: An introduction to behavioural evidence analysis*. 2nd edition. London: Academic.
- Turvey, B. 2012. *Criminal profiling: An introduction to behavioural evidence analysis*. 4th edition. London: Academic.
- University of South Africa. 2007. *Policy on research ethics of the University of South Africa*. Florida: University of South Africa.
- Uys, D. 2014. *South African insurance fraud estimates in line with international trends*. From: <http://www.risksa.com/south-african-insurance-fraud-estimates-in-line-with-international-trends> (accessed 24 September 2014).
- Van der Watt, M., Van Graan, J. & Labuschagne, G. 2014. Modus operandi, signature and fantasy as distinctive behavior: Fundamental considerations in the case linkage of child rape cases. *Child Abuse Research in South Africa*, 15(1):61-72.
- Van der Westhuizen, J. 1996. *Forensic criminalistics*. 2nd edition. Johannesburg: Heinemann.
- Viaene, S. & Dedene, G. 2004. Insurance fraud: Issues and challenges. *Geneva Papers on Risk and Insurance*, 29(2):313-333.
- Wells, T.J. 2005. *Principles of fraud examination*. Hoboken, NJ: Wiley.

Welman, C., Kruger, F. & Mitchell, C. 2005. *Research methodology*. 3rd edition. Cape Town: Oxford University Press.

Woodhams, J., Bull, R. & Hollin, C.R. 2007. Case linkage: Identifying crimes committed by the same offender. In Kocsis, R.N. (ed.) *Criminal profiling: International theory, research and practice*. Totowa, NJ: Humana.

Yokota, K. & Watanabe, S. 2002. Computer-based retrieval of suspects using similarity of modus operandi. *International Journal of Police Science & Management*, 4(1):5-15.

APPENDIX A: SANTAM LETTER OF APPROVAL



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20 May 2018

UNISA
P.O Box 392
Pretoria
0003

Attention Prof. J Van Graan

STUDENT NO.39544400 P GOVENDER: M-TECH FORENSIC INVESTIGATION:

PERMISSION TO INTERVIEW FORENSIC INVESTIGATORS AT GROUP FORENSIC SERVICES, SANTAM

I received an application from Prabashnie Govender a member of my team to conduct field work as part of the completion of her dissertation for the M-Tech degree in Forensic Investigation. It is my understanding that Prabashnie Govender plans to conduct interviews with forensic investigators with the team.

As Senior Manager of the Business Integrity Unit of Santam, I hereby grant permission for Prabashnie Govender to conduct such interviews with members of the forensic team.

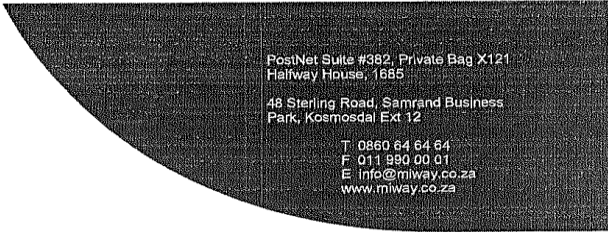
Should you have any enquiries or require any further assistance with your research please do not hesitate to contact me on (021) 915 7058.

Best Regards

A handwritten signature in black ink, appearing to be 'JA' or similar initials, written over a horizontal line.

Jerry Chetty
Senior Manager: Business Integrity Unit

APPENDIX B: MIWAY LETTER OF APPROVAL



20 May 2018

UNISA
P.O Box 392
Pretoria
003

Attention Prof. J Van Graan

**STUDENT NO 39544400 P GOVENDER: M-TECH FORENSIC INVESTIGATION:
PERMISSION TO INTERVIEW FORENSIC INVESTIGATORS AT FORENSIC SERVICES, MIWAY.**

Dear Prof. Van Graan, I have received an application from one of the employees at Santam (Prabashnie Govender) to interview forensic investigators working at the Forensic Department of MiWay as part of the completion of her dissertation for the M-Tech degree in Forensic Investigation.

I hereby grant permission that the employee may interview the forensic investigators.

Should you have any enquiries or require any further assistance with your research please do not hesitate to contact me on (011) 990 0271.

Best Regards,


Hannes Oelsen
Senior Fraud Analyst

MiWay Insurance Ltd Reg No 2087/026289/06 VAT No 4110242692
Refer to the MiWay website for directors & company secretary details.
An Authorised Financial Services Provider (Licence No 33970)

Car Home Business



APPENDIX C: UNISA ETHICS APPROVAL



COLLEGE OF LAW RESEARCH ETHICS REVIEW COMMITTEE

Date: 01-06-2015

Reference: ST 53

Applicant: Mrs P Govender

Dear Mrs P Govender

DECISION: ETHICS APPROVAL

Name	P Govender
Proposal	The value of modus operandi in fraud investigation: a short-term insurance industry perspective
Qualification	M.Tech

Thank you for the application for research ethics clearance by the College of Law Research Ethics Review Committee for the above mentioned research. **Final approval is granted.**

The application was reviewed in compliance with the Unisa Policy on Research Ethics.

The proposed research may now commence with the proviso that:

1. *The researcher will ensure that the research project adheres to the values and principles expressed in the Unisa Policy on Research Ethics which can be found at the following website:*

http://www.unisa.ac.za/cmsys/staff/contents/departments/res_policies/docs/Policy_Research%20Ethics_rev%200505%20Council_22.06.2012.pdf

2. *Any adverse circumstances arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the College of Law Ethical Review Committee.*



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APPENDIX D: CONFIRMATION LETTER: LANGUAGE EDITING

Susanna Elizabeth Louw

Phone 076 588 8561

Email anzelle@wordfix.co.za

SATI membership number 1002866

EDITING DECLARATION

DATE: 13/09/2018

I, SE Louw, hereby declare that the dissertation titled *The value of modus operandi in fraud investigation: A short-term insurance industry perspective*, with the exception of verbatim quotes, has been professionally language edited by me.

If further information is required, please contact me.

SE Louw

Susanna Elizabeth Louw

2018-09-13

Date