The criminal act of committing insurance fraud: The challenges facing insurers when detecting and preventing insurance fraud.

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Declaration

I, Susan O'Brien, declare that this dissertation I have submitted to Dublin Business School for the award of MBA in Project Management is the result of my own investigations, except where otherwise stated, where it is clearly acknowledged by references. Furthermore, this work has not been submitted for any other degree.

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Abstract

Insurance fraud is an ever-growing problem globally with major financial impact to insurance companies and policyholders. In Ireland insurance fraud is not a new problem however it is a very important subject which is gaining media attraction in recent years. This study draws on the opinions of claims handlers employed within insurance companies to see if they could be doing more to detect and prevent insurance fraud. Results are discussed considering the importance of a new database which will be accessible by all insurance companies to view a customer's full claims history and the mandatory introduction of telematics equipment in motor vehicles to help detect motor insurance fraud. This report argues in favour of developing both a national database and the mandatory introduction of telematics equipment in motor vehicles.

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1. Introduction

In recent years, insurance fraud has been brought to consumers attention, an advertisement with the slogan 'it's not funny when it's your money' by Insurance Confidential, encouraged consumers to report others whom they suspected were committing insurance fraud. Why? Because fraud is far from being a victimless crime, the result is that every single policy holder pays for this by way of increased premiums. Staged accidents top the list of insurance scams often involving criminal gangs. However other frauds include fake personal injury claims, staged burglaries, and genuine claims where losses are inflated to receive higher pay-outs (Lie Detector Ltd, 2018). Ultimately it is up to not only insurers but also customers to report any suspicions they may have.

Worldwide fraud is a growing and expensive problem for the insurance industry. In Ireland there is little research done on insurance fraud. There is no statutory definition of fraud in Ireland, but it is a term used to describe offences such as theft, deception, forgery, and false accounting. In Ireland it is estimated that insurance fraud costs the economy €200million per annum. Insurance fraud results in higher premiums for all policyholders as claims costs must be calculated when calculating the cost of policyholders' premiums (The Insurance Institute, 2018, p. 50). Some of the reasons why people commit fraud can be illustrated using the fraud triangle which describes the factors that enable fraudulent behaviour.

Figure 1: Psychology of fraud (Insurance Fraud Bureau New Zealand, 2019)

Motivation: some people may commit insurance fraud due to financial pressure for example greed or addiction.

Opportunity: some people do not believe they're committing a crime and believe it is harmless possibly with the belief that they have paid the insurer and are just getting their monies worth from their policy.

Rationalisation: some people commit insurance fraud in a more systematic and deliberate manner and oftentimes with the mindset that insurers make a lot of money therefore they can afford it (Insurance Fraud Bureau New Zealand, 2019).

There are two main ways in which insurance fraud can be perpetrated

1. Opportunistic fraud
2. Premeditated fraud

Opportunistic fraud is often committed by otherwise law-abiding citizens who see it as a victimless crime (The Insurance Institute, 2018). An example of opportunistic fraud is when a person who has household insurance suffers water damage to the property and inflates the price of fixing the damage to their insurer. To prevent incidents like this happening insurers request quotes from reputable tradesmen such as plumbers and depending on the extent and the amount of damage caused, they will send their own loss adjusters to investigate the damage. Part of the loss adjuster job is to negotiate repair prices with the tradesmen, so this may happen before a settlement is reached.

Premeditated fraud is deliberate fraud where insurance policies are taken out with the intention of committing fraud or deliberately engineering events to enable fraudulent claims to

be made against a third-party policy (The Insurance Institute, 2018). This can take the form of 'cash for crash' motor insurance fraud, which is quickly becoming a global problem, and is when a person takes out a motor insurance policy and stages a motor vehicle crash with another person with the intention of making a false or exaggerated personal injury claim. In "Crash for Cash" fraud scams, fraudsters intentionally crash into another person's vehicle (usually an innocent victim or the vehicle of another fraudster) or use a sledgehammer (or other instruments) to imitate the effects of a crash to submit false claims (Ribeiro, et al., 2019).

1.1 Rationale

In 2016 Deloitte undertook an insurance industry report which allowed them to come up with some challenges insurers face when addressing fraud. One of the biggest challenges they discovered was a lack of industry approach. Instead of insurers sharing information it was kept internal and insurers worked largely independently. This results in a lack of consistency in organisational approach and can lead to many oversights. Many insurers have developed their own internal systems to investigate fraud rather than having systems which are standard across each organisation. In Ireland a privately run company was in talks with the Irish government with the intention of setting up a firm which would use data and perform investigations into a person who was suspected of committing insurance fraud. Upon further investigation the Irish government has ruled that it would be in breach of European General Data Protection Regulation (GDPR) laws and also there is a lack of resources to ensure the smooth running of the database (Deloitte, 2016).

The second biggest challenge Deloitte found was that insurers have limited legal options. The onus is placed upon the insurers to demonstrate that the claimant is acting fraudulently. The legal process is not only lengthy but also expensive where legal and court costs can be in the region of €50,000 per case (Deloitte, 2016). In Ireland there have been cases of claims been

thrown out of court for fraud but there is no follow-up of penalty, therefore there appears to be no downside to bringing a fraudulent claim. While the majority of claimants' act in good faith, a minority bring fraudulent claims to court in the hope they will receive large awards in the tens or hundreds of thousands of euros.

Insurance fraud can arise under many policies and can include motor, liability, and medical insurance policies. Under Irish Law when a person acts dishonestly, with the intention of making a gain for him/herself or another, or of causing loss to another by any deception induces another to do or refrain from doing an act, is guilty of an offence (Irish Legislation, 2001). Under the Civil Liability & Courts Act 2004 a person who is found guilty of fraud can face a maximum fine of €100,000 and/or up to 10 years in prison (Insurance Ireland, n.d.). When a fraudulent claim is made in Ireland the reality is that the person committing the fraud faces no prison sentence or fine and there is no recognition of the significant costs incurred by those who must defend the claim (Cowen, 2019). To further tackle fraud within the insurance industry, the Irish government announced in August this year (2021) that a new Garda Unit will be established to co-ordinate with insurers to fight insurance fraud. Policyholders who believe they are a victim of insurance fraud will be able to contact the Garda Unit directly (O'Halloran, 2021). Insurance Europe (2019) did an estimated cost by country and provided that for Ireland in non-life, insurers detected €76m of fraud but undetected fraud in non-life is estimated to total around €200m. Of all claims around 8% are investigated further for fraud and of these around 4% of all claims are found to be fraudulent (Insurance Europe, 2019).

1.2 Research aims and objective

The primary aim of the research is to identity where employees feel that their organisation could do more, be it within training or how fraud is detected. The insurance companies often

face challenges in proving fraud and this is usually down to the fact that the burden of proof is on insurers and not the claimant to prove that fraud has taken place. The study aims to see if insurers had other systems available to them would it be beneficial in helping the fight against fraud. Using qualitative analysis this research will be conducted based on the opinions of the insurance claims handlers and personnel within the insurance industry.

1.3 Research question:

The research questions are classified as primary research for this research. The aim of the research question is to gain an insight into how insurers deal with fraud. The researcher developed a survey which compiled of 14 questions where five of them were open ended questions. The survey was completed by staff who work within the claims sections of an insurance company. The personnel deal with claims which are taken out under the umbrella term of 'general insurance' policies which include the following policies motor, home and content, and travel insurance. The researcher required the collection of 20 responses as this accounts for 10% of the general insurance claims staff currently employed in Ireland. The survey consisted of questions regarding training, knowledge, and if they believe the implementation of external methods such as telematics equipment in motor vehicles would be useful in discovering if motor fraud was committed or not. This study will inform the reader of the ways in which persons attempt fraud under general insurance policies. It will show that insurers need to be continuously finding ways of improving their systems to detect and prevent fraud. It also aims to find out what role Artificial Intelligence (AI) can play in helping prevent fraud.

1.4 Hypothesis

This study is focused on the development of hypotheses regarding the systems needed to help insurers to be better able to detect and prevent insurance fraud. Using a deductive approach these hypotheses are the implementation of new system's that will help in the detection and prevention of fraud. One of these systems would include the full claims history of all persons that have made a claim on their current or past insurance policies. The other system is whether the mandatory introduction of telematics on motor vehicle would be beneficial in the fight against motor insurance fraud. To the researcher's knowledge these hypotheses have not yet been tested in Ireland.

1.5 Significance of the research

Fraud prevention not only helps insurers but also customers as where savings for the company could also result in savings for the customers. This study will contribute to the implementation of new systems which could be valuable in foreseeing a reduction in insurance fraud. Insurance fraud is something which is in the forefront of not only the media but the Irish government in recent months. The significance of this project is to see if more can be done to counteract insurance fraud. With the help of government intervention would introducing a new claims database benefit both the public at large and the insurance companies.

1.6 Research contribution

There is no one mechanism used by insurance companies in Ireland that enhances the deterrence and detection of fraud. To effectively deal with fraud do insurers require better databases that store all information instead of internal databases which store only the insurers client information? Would the adoption of artificial intelligence be informative enough to be

able to provide insurers with the weapon they need to catch insurance fraud before resorting to

court proceedings against a person?

2. Literature Review

Many areas of research have been carried out to determine why people commit insurance fraud and yet there is very little research into how the insurance companies deal with and handle fraud. The aim of the literature review is to answer what procedures the insurance companies have in place to investigate insurance fraud. This is then further broken down to cover the following topics:

1. What priority does insurers place on detecting fraud? - fraud detection involves monitoring the behaviour of populations of users, within an organization, to identify actual or expected undesirable behaviours. It is applicable to many domains, including banking and financial sectors, health care insurance systems, telecommunications, government agencies, and more (Bolton, & Hand, 2002). Since fraud is typically an act which involves repeated methods, searching for patterns in the transactions of the users is the general focus for fraud detection (Herrera Murillo, 2019).

2. What procedures would help insurers to prevent fraud? - fraud prevention is the implementation of a strategy to detect fraudulent transactions or banking actions and prevent these actions from causing financial and reputational damage to the customer and financial institution (FI) (Onespan, 2021).

In 2013 the Insurance Regulatory and Development Authority (IRDA) laid down guidelines requiring insurance companies to have in place a comprehensive fraud monitoring framework which included developing an anti-fraud policy. The anti-fraud policy advises insurers to adopt a holistic approach to adequately identify, measure, and monitor fraud risk and lay down appropriate risk management policies and procedures (The Insurance Regulatory and Development Authority, 2013)

2.1 What is insurance

Insurance is a contract represented by a policy, in which an individual or an entity receives financial protection or reimbursement against losses from an insurance company. For motor insurance cover the insurance company pools clients using information such as address, vehicle make and model, and years driving experience to make premiums more affordable to clients (Kagan, n.d.).

There are many policies under which insurance fraud can take place, the focus of this literature review will be on travel, motor, and home insurance fraud. These areas are classed under general insurance, due to the short time given to undertake research it would be impossible to correlate the information received from commercial insurance policies.

Home Insurance: covers man-made and natural circumstances that may result in damage or loss.

Motor Insurance: provides coverage for your vehicle against damage accidents, vandalism, theft etc. It comes in two forms, third party and comprehensive cover. Motor insurance is mandatory under the Road Traffic Act for all vehicle users.

Travel insurance: safeguards a traveller in case their flight is delayed, cancelled or luggage is lost from international travel (Insurance Ireland, n.d.).

Generally, there are three main principles that are common across all standard insurance policies:

- Cover is provided for the actual value of the property or item that has been lost or damaged and not sentimental value.

- There needs to be many similar risks so that the likelihood of a claim can be spread among other policyholders for insurers to calculate the chance of loss so that a premium can be set which matches the risk.

- Losses must not be deliberate

2.1.1 How premiums are calculated:

Insurers use risk data to calculate the likelihood of the event a person is insuring against happening. This information is used to work out the cost of a customer's premium. The more likely the event the customer are insuring against is to occur the higher the risk to the insurer, therefore the higher the premium. Insurers consider two important factors when calculating premiums:

1. How likely is it in general terms that someone will need to make a claim?
2. Is the person who wants to take out the policy a bigger or smaller risk than the average policyholder. For example, a young person with a high-powered car may be charged a higher premium as they are statistically more likely to be involved in an accident than a mature experienced driver (ABI, 2021).

2.2 What is fraud

The term fraud is not one standard definition and varies within companies. Kovachi defines fraud as "a concealment or false reorientation through a statement or conduct that injures another who relies on it in acting". All State, a national insurance company in the United States, describes insurance fraud as "a crime that occurs when someone knowingly lies to an insurer in order to receive payments." By fraud, someone obtains payment, money, and benefits from a specific institute, such as a bank, insurance company, health care organization, or individual. While one side benefits it can harm the interests of another side. Among all kinds of fraud,

insurance fraud is the most severe one. According to National Insurance Crime Bureau (NICB) and Federal Bureau of Investigation (FBI), fraud is the second most costly white-collar crime in America behind tax evasion (Tian, n.d.). The International Association of Insurance Supervisors (IIAS) (2007) defines insurance fraud as "an act or omission intended to gain dishonest advantage for the fraudster or for the purpose of other parties" (International Association of Insurance Supervisors, 2007).

Pineta & Alfonso have defined fraud as any intentional act by persons, individual or collective, perpetrated with deception that causes, effectively or potentially, advantages for someone or damage to others and which violates either good social practices or the law (Teixeira, et al., 2014).

Derrig 2002 has provided the following definition in relation to criminal fraud as the "wilful act of obtaining money or value from an insurer under false pretences or material misrepresentations" (Derrig, 2002).

In Ireland, the definition of fraudulent claims differs between insurance companies. Allianz defines a fraudulent claim as 'any deliberate attempt to seek compensation through criminal deception, misrepresentation, or exaggeration'. Axa says it is 'a deliberate act or omission upon which the company relies, undertaken with the deliberate intent of deceiving the company to gain financial advantage' (Dwyer, 2019).

2.3 Types of fraud

There are two distinctive types of fraud that insurers deal with, hard fraud and soft fraud.

Hard Fraud relates to claims which are intentional perversion of the truth and are 100% fraudulent for example a staged car crash. Soft fraud is related to attempts to inflate or exaggerate the claims amount after the occurrence of an insured event to obtain higher indemnification for example claiming for an item for more than its actual worth (Derrig, 2002). Fraud can affect all types of insurance including non-life, life and protection or health. It occurs when at least one of these conditions is met:

- Providing untruthful or incomplete information in applications for insurance or answers on an insurance proposal form.

- Submitting a claim for a loss based on misleading or untruthful circumstances, including exaggerating a genuine claim.

- Otherwise, being misleading or untruthful in dealings with an insurer with the intention of gaining a benefit under the insurance contract (Insurance Europe, 2019).

2.3.1 Car insurance fraud

Car insurance fraud happens when someone lies to an insurance company to make a financial gain and can take many forms including:

Fronting – this is when someone is added to a car insurance policy as a secondary or named driver, but they're in fact the main driver. For example, if a parent added their son or daughter to their own insurance policy as a named driver, rather than getting the younger driver their own policy. This brings down the cost of insuring a younger driver considerably, but it is illegal (Kennco, 2021).

Modifications – any changes which are done to the vehicle should be notified to your insurer Making any modifications to your car, or if you buy a car that you know has been modified, your premium may change. Modifications may affect the performance of a vehicle. Fitting your car with increased security or safety features may bring down your premium, but most

modifications will result in an increase, especially if they add value to the car or boost its performance (Liberty Insurance, 2021).

Abandoning a Car - this is considered fraud when an owner abandons their car, sets fire to it or does something similar to dispose of it, and then claims it has been stolen to recover money through their insurance (Liverpool Victoria LV, n.d.).

Change of circumstances - insurance premiums are calculated on a range of different factors, so when those factors change, it's important you let your insurer know. These include things like your home address, where your car is parked overnight, your occupation and the way you use your vehicle, for example, whether you commute to work every day in your car or if you use your car for business purposes when its insured for personal use only (Liverpool Victoria LV, n.d.).

Crash for Cash - when scammers cause an accident for which the other driver can be blamed. The Insurance Fraud Bureau in England three methods fraudsters adopt to do this:

- The staged accident - involving two vehicles, both driven by criminals, and crashed away from witnesses.

- The induced accident - when criminals brake suddenly or deliberately to create a crash involving unsuspecting motorists.

- The ghost accident - when there's actually no accident at all, but instead a fake insurance claim is submitted (Insurance Fraud Bureau, 2019).

Crash for cash claims is becoming more common worldwide. This sort of incident sees offenders suddenly slam on their brake for no apparent reason and cause the person driving behind them to then crash into the back of their vehicle. This is solely done with the intention of making a compensation claim on the third party's insurance policy (Alexander, 2020).

2.3.2 Home insurance Fraud

Home and contents fraud takes place when someone knowingly submits an inflated claim under their household policy to more than the actual value of the damage of loss. A report conducted by the Pennsylvania Insurance Fraud Authority (2021) on homeowners in Pennsylvania's found the most common types of homeowners insurance fraud involved:

- overstating the value of stolen items in a burglary of a home or vehicle

- lying about the extent, cause, date or location of damage

- intentionally damaging property to make a claim

- staging a phony burglary or vehicle break–in and faking the theft or damage of property

- asking a repairman to "cover the deductible" by increasing their estimate or bill

- fabricating supporting evidence, such as repair bills or receipts, often in collusion with a crooked contractor, plumber, repairman or insurance adjuster

- concealing that a residence is used as a rental or in a commercial business (Pennsylvania Insurance Fraud Prevention Authority, 2021).

2.3.3 Travel insurance fraud

There are different types of false claims and misleading statements made to insurers that could be considered travel fraud including:

- Making a claim for lost baggage when nothing was lost or inflating the value of items you allegedly had in your baggage that was misplaced.

- Claiming injuries sustained on a trip that never occurred, and/or seeking treatment in clinics where doctors make false claims for care not provided.

- Medical providers overcharging for treatment in travel clinics because they believe that is what the insurance will pay, not because that is what the services are worth.

- Claiming a trip had to be cancelled because of illness or emergency when you cancel for other reasons not covered by travel insurance.

2.4 Fraud Detection

As fraudsters change their tactics to go undetected, the insurance companies change how they detect fraud. Concept drift in fraud detection refers to the phenomenon that new types of fraud evolve over time and get more and more unpredictable. It's mainly caused using non-stationary features in fraud detection systems. Non-stationary behaviours, such as the number of claims made in the past month, can be easily affected when fraudsters change their tactics (Baier, et al., 2020). To try and predict areas where fraud is taking place the various claims can be given labels.

Ling et al. (2020) study presented that labelling deploys rule-based fraud detection system outputs by using a risk tag for each account, these can be labelled 'high risk' and 'no observable risk'. 'High risk' accounts would require close monitoring, but it is unclear whether the 'no observable risk' accounts are at risk or not as no patterns have yet developed (Liang, et al., 2020).

Oskarsdottir et al. (2020) argues that only a small number of claims are labelled due to time constraints and lack of resources therefore not all claims undergo a thorough investigation. Hence why several fraudulent claims will always go undetected (Oskarsdottir, et al., 2020). Dionne et al. (2009) showed that an optimal auditing strategy takes the form of a red-flags approach, which entails referring a claim to the auditing unit once certain fraud signals have been observed (Dionne, et al., 2009). Whilst investigators can access information from a variety of sources such as witnesses, databases and physical evidence, claimant interviews are proven to be the most important step in deciding whether a claim is denied or paid. Organisations

usually neither have the time or the resources to investigate all suspicious claims therefore fraud investigators use their expertise to make decisions (Warren & Schweitzer, 2018).

2.4.1 Role of Big Data and Technology

The Insurance Information Institute (2021) believes one of the most effective means of combating fraud is the adoption of data technologies that cut the time needed to recognize fraud. Advances in analytical technology are crucial in the fight against fraud to keep pace with sophisticated rings that constantly develop new scams (Insurance Information Institute, 2021). A relatively new concept for driving insurance is usage-based insurance where insurers collect a customer's driving data using a telematics device. A telematics device is a small black box which is fitted into the insured's vehicle and tracks information such as acceleration, breaking, distance travelled and speed (Quintero, et al., 2020). The information uses a GPS which is collected by the telematics box will then decide whether a person's insurance premium will be reduced or increased based on their driving patterns and behaviour. Telematics is used in a lot of fleet policies under a business commercial insurance policy but is not mandatory for fleet policies and it is not mandatory in the general insurance policies but is used a cheaper insurance alternative for a lot of young drivers. Telematics can also be used to charge customers insurance premiums based on driving behaviour rather than the current way, which is based on make and model of vehicle, year of vehicle and length of time a person has been driving in their own name. By analysing the style of data collected it can develop prediction models and determine the driving behaviours of a customer (Kumar, 2018).

Statistics from the auto insurance British Insurance Brokers' Association (BIBA, 2018) show that:

- There is a 40% fall in accident risk when a new driver has a telematics policy.

- Average parameter reduction has a direct or indirect impact on 38% accident risk.

- The percentage of drivers with improved driving score after introducing the self-check clause is 70%.

- Claims are reduced by 30%.

- The adoption of the pay-as-you-drive motor insurance clauses may cause the annual mileage to decrease of a vehicle by approximately 10%.

It should be noted, however, that the fall in accident rates is not linear in relation to the reduction in mileage (British Insurance Brokers' Association, 2018).

Scott Clayton who's head of claim fraud in Zurich Ireland believes in-vehicle technologies, such as telematics systems and dash cams, have an important role to play, Modern telematics systems, for example, can provide an exact speed at the point of impact. If someone is alleging, they suffered whiplash when the telematics indicates an impact of 3mph, this provides a good indication that there is a claim to defend.

"Dash cams can offer an independent view of an incident. Previously, if a commercial vehicle driver claimed that a crash was caused by the vehicle ahead slamming on the brakes, defending the claim would have been difficult." Zurich have also invested in a software database which is to be used to detect suspicious claims patterns across Zurich's entire portfolio. Using complex algorithms and data analytics spread across different business lines, the software can help uncover individuals trying to hide their real identity to avoid traditional detection techniques". For example, Zurich can quickly identify when an individual who has been investigated for a suspicious household claim appears on a commercial vehicle claim. (Zurich Marketing, 2019).

In 2016, insure the box a telematics insurance provider in the UK was able to use telematics data collected in their insureds drivers' vehicles to disprove 31 claims in seven accidents over a five month period with one fraud case valued in the region of £500,000. Telematics equipment allowed them to perform an in-depth investigation to track the data recorded in the customers vehicles and prove that a relationship existed between all parties therefore the

plaintiffs' cases collapsed in court and the plaintiffs were made pay all the legal costs (Insure the box, 2016).

2.4.2 Technology used in detecting fraud:

Along with an investigator's intuition and expertise, data usage is becoming popular in detecting insurance fraud. In recent years three systems have been adopted by insurers to help to detect fraud. These are the video spectral comparator, the electrostatic detection apparatus, and voice detection technology.

- Video spectral comparator (VSC): this uses different light rays from ultraviolet to infra-red and is designed to detect alterations to a document, and is used particularly on invoices, estimates and receipts. Different inks fluoresce either more or less intensely under different light rays, and thus alterations to the document made with a different ink from the original will stand out (Gill, 2001).

- Electrostatic detection apparatus (ESDA): this equipment can detect indentations produced by handwriting. For example, if a note has been written on a pad, the sheets below are normally indented by the pressure of the pen. ESDA can pick up this indentation so that it can be easily read (Gill, 2001).

- The voice stress monitor which is designed to pick up speech patterns such as long pauses between responses to questions and these have proven to be useful in insurance companies such as Halifax Bank of Scotland (HBOS). Since 2010 insurers in Ireland such as Aviva have been voice detection technology to detect whether a person is lying about their claim (McMorrow, 2009).

A report conducted by synthetic solutions in Britain found that:

- Voice detection technology is not 100% accurate for detecting fraud and only 80% to 90% of false statements will be successfully detected.

- In 2014, insurers uncovered more than 212,000 dishonest insurance applications for car insurance, an increase of 18% on the previous year.

- The Association of British Insurers (ABI) revealed that insurers uncovered 130,000 fraudulent claims in 2015, the equivalent of 2,500 a week.

- The ABI estimates that fraud adds on average an extra £50 to the annual insurance bill for UK policyholders.

(Synectics Solutions, 2017).

2.5 Solutions to fight insurance fraud

Mehmet & Ganji (2021) suggested the following are some operational strategies for insurance companies that, as trustees, should take steps to prevent and detect fraud:

1. Establishment of a special investigation office in insurance companies: Insurance companies should take action to set up this office within the company to fight against insurance frauds. Insurance companies should employ the best research experts to form and set up this office. The department investigates the accuracy of the incident and other cases suspected of fraud through both investigations and field investigations into cases that have been identified by fraud assessors and damage experts and provides the necessary evidence for litigation by companies' legal units

2. Use of damage assessment experts with insurance information and expertise: One of the most important steps in the claims settlement process is the assessment of the case by claims experts. Unfortunately, insurance companies, due to the lack of qualified and experienced damage assessment experts, cannot correctly identify all cases of suspected fraud and misconduct. As a result, many counterfeit claims are deemed payable and, in addition to damaging insurance companies, encourage fraudsters to file fraudulent cases and receive fraudulent damages.

3. The need for necessary training for experts and damage assessors: Given that some experts and damage assessors are inexperienced and due to the dynamic nature of fraud and new methods that are created over time, companies need the necessary training and continuous training workshops.

4. Establishment of a legal department with legal experts and knowledge of insurance laws in insurance companies: Insurance companies should establish a legal department using legal experts who are proficient in insurance laws. Many insurance claims cases require legal experts who are proficient in insurance law to be able to defend the rights of insurance companies based on evidence, documents, and insurance laws. (Mehmet & Ganji, 2021).

Ireland does have a 'cheat line' where members of the public can call the Insurance Confidential hotline and report people, they suspect are committing fraud (Insurance Europe, 2013). It is used thousands of times a year, with over 90% of insurance fraud suspicions been reported anonymously. By the end of 2017, 11 351 of the cases had been deemed worthy of being referred on to insurers for investigation (Insurance Europe, 2019).

2.5.1 Developing a system for all insurance companies:

Artificial Intelligence is used to leverage computers and machines to mimic the problem-solving and decision-making capabilities of the human mind (IBM, 2020). Using Artificial Intelligence (AI) to augment the workflows of claims adjusters via AI-enabled search and discovery software, also known as enterprise search and information extraction software. These applications allow claims adjusters to search an insurance carrier's database for historical claims, helping them with four key parts of the claims process:

- Digitising claims
- Ensuring completeness and accuracy across claims forms and supporting documents

- Determining the optimal amount that should be paid out to a claimant

- Determining if a claim is fraudulent

The information stored in the database can be used to detect if a claim is possibly fraudulent by drawing on information such as the claim amount, claimants' details including name, address, and date of birth.

Search and discovery applications can also help claims adjusters identify new instances of claims fraud by allowing them to compare the incident described on a new claim with incident descriptions in historical claims that were never flagged as fraud. For example, a new claim may describe a car accident that is similar in detail and wording as historical claims that were filed by claimants with different names. The claims adjuster might then set aside these claims for further investigation, and a claims fraud specialist may find that these claims were all filed by the same person under different names, revealing long standing fraud (Azulay, 2020). Timofeyev (2021) argues that human involvement is also as important as AI, as the human is essentially the decision maker, and their involvement is also important in the detection of fraud (Timofeyev, 2021). AI is technology which, when fed the right amount of data, can interpret the data, learn from the experience, is able to perform tasks normally requiring human intelligence & deliver the specified required goal. What AI does is via pure algorithms, it analyses a large number of data & finds patterns. It then identifies differences where it cannot fit into the patterns.

AI can also be used in visual analytics where the AI can assess the damage done to a vehicle or property. The internal policies of different companies now need to be clearly specified to avoid internal fraud. AI can take a view through a company's claims structure, employee details and policy holders' details to look for patterns that could indicate a large-scale fraud. The analysis might include a behavioural data, transaction histories & movement histories. With health & motor insurance claims where the company is more susceptible to fraud the AI might

compare the bills of hospitals for similar illness & can spot an exceptionally higher amount of claim or a lower amount of claim which may mean that the fraud was of a minor amount so as not to get detected.

AI detection features some of the following:

- Insurance credit scoring is a rating used by an insurance company to compute the probability of an individual filing an insurance claim while under the cover. AI can read through a large amount of data & score the risky claims. It can check & cross check the data, segment the risk & score them. This will help in knowing the risk factors involved in claims. Work which might normally be time consuming if studied & analysed by a human can be done by AI in a matter of seconds. This is a great way to simplify the fraud detection system of Insurance (Insurance Information Institute, 2021).

- Data can be collected in real time by using sensor which are attached to motor vehicles that will feed information back to the insurance companies database. For example: in the motor industry, insurers can use telematics to collect real time data from vehicles. Previously they used basic information about the vehicle & driver to build policies. Now they can use telematics analytics & complex algorithms to do the same work within seconds.

- Behavioural Data- AI can automatically explore customers' economic & social data, not interfering with their privacy, to determine their way & pattern of living. A customer's financial stability & lifestyle risk factors can be determined through AI. It can help the company as well as customers with the setting of tailored premiums. The financial behaviour of the customer may determine the higher or lower premium to be fixed.

- Live Monitoring- AI continuously monitors the change of pattern in claims & adapts to that. Wherever it experiences a change in pattern it triggers it. For example: in health

insurance, the continuous monitoring through wearable accessories such as fitness trackers like fitband etc may help track clients' movements, their health & fitness without breaching their privacy.

- Automation- one of the most important factors which could be implemented using AI is to improve the claim process. It will be touchless & shall remove excessive human interference. The customer may experience a hassle-free claim filing & the claim would be settled within a matter of a few minutes. AI will not just settle quickly but efficiently, undergoing various tools to check the policy, verify it & detect any fraud possibilities. If it finds necessary, it may trigger a notification for a claims handler to then investigate it. If not, it may settle the claim. Setting up an insurance bureau which uses AI and analyses all the data received from all the insurance companies could be beneficial for a mature insurance market such as Ireland's (The Journal of Insurance Institute of India, 2020).

In 1994 The Claims and Underwriting Exchange was created in England and Wales and their database possesses details of all incidents reported to insurance companies relating to motor, home, personal injury, and industrial accidents. It has millions of records and enables insurers to check claims to see if the claimant has made previous claims and failed to disclose them (Button & Brooks, 2016). The Irish government had been in talks with various departments, such as the department of finance, state claims agency (SCA) and central statistics office, to see if Ireland should set up a national register. One of the main reasons for not currently having such a database was due to consumer privacy concerns and it could take years to operationalise (Law Society, 2019).

Under Insurance Law, the onus is placed on the policyholder to honestly disclose all previous claims they have received a monetary amount for. This allows the insurer to evaluate the risk and therefore calculate a more appropriate premium to charge (Marano & Siri, 2017). This requirement places the traditional duty on a consumer to act with utmost good faith and provide full disclosure. There is now no duty to volunteer any information over and above the questions posed. Where there is doubt over the meaning of a question, the interpretation most favourable to the consumer will prevail (Mason, Hayes and Curran, 2020). Non-disclosure of a previous claim can result in the insurance company refusing to pay in the event of an incident taking place if the contact is found to be void.

2.6 Techniques used by insurers in Investigating Insurance claims:

The biggest impact of fraud is faced by the insured and prospective customers. It leads to a delay in processing of the claims, delay in settlement, & the investigation goes on and on, consuming a lot of valuable time & money of the insurance company. It is hard to specify the time taken for an investigation to complete because it depends on the type of fraud & the potential & people involved in the fraud. Where a normal case may take just 30-45 days of time for investigation & settlement thereafter, a complex investigation process may take years. Fraud may drive the policy cost high & also affect the ratio of claims for insurers (The Journal of Insurance Institute of India, 2020). The duties of claims staff include:

- Thoroughly cross checking the documents received and verify them as been authentic. Documents should be re-checked and investigated if there is any doubt.

- Review supporting documentation that has been received to back up the claim, this can include medical reports and bills and witness statements. Early detection of a possible fraud will help in reducing the loss.

- Use data analytics to search for previous claims history and to do a background check on the claimant.

- Consult the Special Investigation Unit (SIU) and provide them with any information gathered if fraud is suspected. The Special Investigative Unit is a unit or department within an insurance company involved in detecting and pursuing action against fraudulent activities on the part of insureds or claimants (IRMI, n.d.).

- Allocate investigators to follow and take recordings or pictures of the claimant to prove fraud. They can also follow up on witness statements and delve deeper into the case.

2.7 Problems facing insurers

Insurers are facing an ongoing talent crisis with an ageing work force they are finding it difficult to recruit employees with specialist knowledge in areas such as special investigations and claims adjustment. Consumers have become more tolerant to fraud despite the fact it drives up premiums and some studies show that consumers feel it's acceptable to defraud insurance companies under certain circumstances. Some people see it as a way of getting back some of the money they have paid on premiums over many years (Deloitte, 2016).

As fraud can be perpetrated through collusion involving more than one party, insurers should adopt a holistic approach to adequately identify, measure, control, and monitor fraud risk and accordingly, lay down appropriate risk management policies and procedures across the organisation. The severity of the fraud can range from a slight exaggeration to deliberately causing loss of insured assets. The insurance industry is aware of the risk but the lack of comprehensive & integrated system to manage fraud risk continues to be a concern. Innocent customers have to face the outcomes of the loss due to fraud. The rise in premium amount is a product of the losses faced by insurance industry due to fraud every year. Even though the

insurance industry and companies use agent investigation, adjuster inspection, and internal auditor examine to fight fraud they cannot catch all fraudsters (Tian, n.d.).

2.8 Court awards in Ireland

In Ireland the judicial system the book of quantum is used as a reference point in order to determine the monetary award a person may be entitled to when they have sustained an injury. Ireland has one of the highest insurance claim's payments within the European Union. High levels of insurance costs in Ireland can be attributed to the levels of damages been awarded by the courts to the injured party (Greeenford, n.d.).

Claims can be assessed by the Personal Injury Assessment Board (PIAB). PIAB is Ireland's independent State body which assesses personal injuries compensation in a timely and cost-efficient manner. PIAB assesses compensation in respect of personal injuries suffered by people in motor accidents, workplace accidents and public liability accidents. All personal injury claims must go through PIAB, unless settled early between claimants and insurers/respondents. PIAB has assessed more than 130,000 cases since it was set up in 2004 and over 60% of claimants have accepted its assessments. Their model has very low processing costs and is far quicker than litigation. Claims may be resolved by direct settlement between the parties, a PIAB assessment, or litigation. Court decisions ultimately determine overall damages levels, and the PIAB model preserves the constitutional right of access to the courts (Personal Injuries Assessment Board, n.d.).

Number of awards in 2019	11,527
Total value of awards in 2019	€275.04m

Awards by claim Category - % Breakdown of awards by category	Motor - 70% Public Liability - 17% Employers Liability - 13%
Breakdown of Total number of Awards	Motor - 8,050 Public Liability - 2,009 Employers Liability - 1,468
Values of Average Awards by Category	Motor - €22,186 Public Liability - €26,186 Employers Liability - €29,859
Highest award in 2019	€426,488
Months to assess claims	within 7.8

Figure 2: PIAB 2019 Statistics (Personal Injuries Assessment Board, n.d.)

In 2019 representatives from three insurance companies. FBD, Axa and Allianz were scrutinised over statements they made stating they had estimated 20% of personal injury claims they received to be fraudulent or exaggerated. All three company representatives stated that legal fees and high court awards were reasons for the increase of insurance premiums. Axa have 60 former Garda's who work with them to investigate claims they believe are fraudulent. Fiona Muldoon CEO of FBD believes that the courts lowering injury awards would help in tackling fraud. The average award for whiplash in Ireland is around 4.4 times higher than in

the UK with costs been €15,700 for minor whiplash to €77,900 for severe and permanent whiplash (Book of Quantum, 2016, p. 29). It is worth noting that each company internally dealt with 20% of suspected cases and it is not known how many turned out to be fraudulent (Dwyer, 2019).

Professor Ronald V Clarke is a criminology researcher whose areas of expertise include rational choice theory, situational crime prevention, problem-oriented policing, and crime analysis. Whilst undertaking studies using rational choice theory, he conducted research into why people commit insurance fraud and found that "*the greater the personal benefit and the lower the personal cost of an action, the more likely it is to be committed*" (Anon., n.d.). In August 2021 the Irish government announced it was in the process of bringing about changes which will see a significant reduction in the amounts which are rewarded to persons in personal injury claims.

Peter McDonald Eggers QC is a specialist in commercial law with a particular focus on insurance. English case-law in recent times has been generally emphatic in holding that an insured is under a duty not to make a fraudulent claim. The basis of the duty however is a matter upon which the judges have differed. Eggers et al (2011) argues that the duty not to make a fraudulent claim can be accommodated under the duty of utmost good faith. Eggers argues that the law requires a rule which will deter insurance fraud while at the same time averting the prospect that avoidance, as an inflexible remedy, can be a possible source of injustice. The Law Reform Commission agrees with this perspective and would support the view that Irish law should attempt to provide a flexible response to the fraudulent claims problem, whilst eschewing difficult questions of definition e.g., forfeiture of claims as distinct from contractual rescission, avoidance, whether retrospective or prospective. Eggers puts forward several arguments that support the view that an insurer, absent fraud, should not be

liable for consequential losses. Eggers favours a limited duty on the insurer in respect of claims handling because he believes that the duty of good faith is, or should be, the basis of an insured duty not to make fraudulent claims. Indeed, Eggers takes the view that an insurer will be liable if the insurer makes a knowing misrepresentation of fact, and probably of law, in their handling of a claim; this will be a breach of the duty of utmost good faith (Law Reform Comission, 2011).

There is also consequence for the fraudster if they have been found to have acted fraudulently and this can result in there insurance policy been cancelled from inception, the insurer can seek to recoup any costs they have incurred including any experts who were required to help in assessing with the claim, inability to obtain insurance or any other financial service such as a loan or mortgage, a thorough Garda investigation which can result in prosecution, a criminal record and or a custodial sentence, impact on obtaining future employment and social stigma (Insurance Europe, 2019).

2.9 Research Gap

The literature review suggests that insurers have their own internal definition of fraud rather than one definition that is applicable to all insurance companies. The insurance companies have internal systems which deal with suspected fraud rather than having a standardised system which is accessible by all insurers. Whilst insurance link is available in Ireland to all insurers to check for fraud, this database does not include details on personal injury claims which a person may be regularly claiming for. Limited research has been carried out on how improvements in current systems and improvements or adaption of data analysis can help insurance companies in the detection and prevention of fraud.

3. Method

This section outlines the theoretical framework and methodology used to determine how fraud is detected, investigated, and prevented within the insurance industry. The research is mainly focused on whether employees within various insurance companies would welcome a new database which would hold information on policyholders' previous claims and amounts they were awarded and whether making equipment such as telematics mandatory in motor vehicle would be beneficial in ensuring there is less fraud in motor claims. Data was collected using both primary and secondary research. The researcher looked at books and thesis studies which were previously undertaken by peers. Collection of secondary data was mainly through Dublin Business School online library, Dublin Business School database EBSCO, and Google Scholar.

Before undertaking primary research, the researcher looked at 3 ways to approach research namely qualitative, quantitative, and mixed methods approach. Qualitative research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. The final written report has a flexible structure. Quantitative research is an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analysed using statistical procedures. Mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of inquiry is that the combination of qualitative and quantitative approaches provides a more

complete understanding of a research problem than either approach alone. (Creswell, 2014, p. 32).

Before deciding which approach to take the researcher looked at previous studies which were undertaken by peers for their masters and PhD studies. Upon review of the information available the researcher made the decision to use qualitative research. The researcher narrowed down the decision further and made a choice between undertaking interviews or developing a survey questionnaire. For the purposes of this study the researcher chose to undertake a survey as their form of qualitative research. According to Saunders, Lewis, and Thornhill (2009), the survey strategy is usually associated with the deductive approach. It is used for exploratory and descriptive research and frequently answers who, what, where and how much. Surveys are popular as they allow the collection of a large amount of data from a sizeable population in a highly economical way. Often obtained by using a questionnaire administered to a sample, these data are standardised, allowing easy comparison. In addition, the survey strategy is perceived as authoritative by people in general and is both comparatively easy to explain and to understand. The data collected using a survey strategy can be used to suggest possible reasons for relationships between variables and to produce models of these relationships. Using a survey strategy gives more control over the research process and, when sampling is used, it is possible to generate findings that are representative of the whole population at a lower cost than collecting the data for the whole population (Sauders, et al., 2009, p. 144).

Quantitative data	Qualitative data
• Based on meanings derived from numbers	• Based on meanings expressed through words
• Collection results in numerical and standardised data	• Collection results in non-standardised data requiring classification into categories
• Analysis conducted through the use of diagrams and statistics	• Analysis conducted through the use of conceptualisation

Figure 3: Distinctions between quantitative and qualitative data (Saunders, et al., 2009, p. 482).

The researcher's questionnaire consisted of 14 structured and semi structured questions. Some questions were from Karen Ann Gill 2001 and adapted from the existing questionnaire which this researcher had devised about insurance fraud (e.g., questions 4,5, 6, 7, 8 and 9]. The remaining questions were designed based on research conducted by the researcher and included the researchers practical experience and knowledge of the claims department within insurance companies. The first 1 to 3 questions were based on the participants role, length of service and company they are employed by. Questions 4, 5 ,6, 7, 8, 9, 10, 11 and 12 all related to internal procedures and training which the participant receives. Question 13 and 14 related to opinions on whether having other systems available would help in detection of fraud. The researcher was specific about the regions and only considered the respondents who worked within the Irish Insurance Industry.

3.1 Procedure

Once the questions were developed and the survey completed, there was an overview provided which detailed how the study was for academic purposes and that the responses would be received anonymously. The participant is advised that they are in no way identifiable by name. All responses were going to be held for a certain length of time until the researchers'

final grades are released. The length of time to complete the survey was given and that the survey consisted of 14 questions. The participant was advised they could withdraw at any stage without having to provide any explanation for their withdrawal. The researcher's college email address was provided to participants, and they could contact the researcher at any stage if they had any queries. To complete the survey, the participant had to choose whether they gave consent or did not wish to participate before undertaking the survey (see appendix 7.1).

3.2 Participants

20 people with experience and knowledge of insurance claims were required to participate in the survey which accounts for about 10% of all personal insurance claim's handlers in Ireland. It is important to note that in the majority of insurance companies, commercial insurance policies do have their own claims handling team within insurance companies. The commercial insurance teams usually deal with incidents that happen under policies which are covered by business insurance and can include liability claims, damage to stock claims and incidents covered under a business's motor fleet insurance. Participants of the survey were employees of various insurance companies or brokers in Ireland. Only questionnaires which were answered by Irish claims handlers were considered for this study. The researcher used some existing contacts and asked them to complete the survey, permission was given by the researcher for these contacts to send the link to other co-workers who may wish to partake in the study. This had the effect of snowball sampling where the research participants asked others to assist the researcher in identifying other potential subjects (Oregan State University, 2010). This resulted in the researcher been able to get a further reach of participants instead of just their own personal contacts. The researcher used a correlational design to carry out the research as this does not allow any manipulation of data and will better answer the researchers hypothesis regarding whether claims staff believe that a claims system database which would

be accessible by all insurance and hold details on any claims made a person would be of benefit to them, and in their opinion if there was a mandatory enforcement of telematics on motor vehicles would lead to a reduction in motor claims fraud.

3.3 Design

All participants who responded to the survey worked within the insurance industry where the participants all had a knowledge of claims within the general insurance section. Each participant was asked to provide the name of the organisation they worked for. This allowed the researcher to group the responses based on the name of the insurance company. The researcher was then able to see which insurance companies staff provided the most responses and to also see if the staff agreed or disagreed with some areas.

3.4 Materials

The research choice is qualitative, and a survey was devised due to a higher audience reach potential. Non-probability sampling was used, and the focus is to find out about training, development, and what future improvements do employees want to see in the insurance claims sector. The format of the survey was to first ask demographic question such as what insurance company the respondent works for, their role within the claims department and their length of service. The second format of the questions was regarding the participants training and development and comparing how many cases of fraud they have dealt with which went to court in the last 12 months using a matrix question. The third format of the questions was to ask if new features such as telematics in motor vehicles would help in the prevention of fraud in the motor industry. As some of the insurance companies may have different internal procedures some open-ended questions were asked where respondents were asked to please specify further

on their response. The survey was distributed on social media platforms such as LinkedIn, Facebook, and Twitter.

The questionnaire consisted of 14 questions. The aim was to receive responses from 20 participants undertaking various roles within the insurance claims section. The employees ranged from claims handlers to underwriters. Participants were advised that the survey would take no longer than 5 minutes to complete. Not all surveys were returned fully completed by general insurance claims personnel, with some participants not expanding on their reason for choosing some of the 'yes and no' questions.

The aim of some of these research questions was to determine should the insurer be doing more to tackle fraud. To gather this information, the researcher will ask the participants a serious of questions and these will be monitored using a binary scale. Non-disclosure of a previous claim has been described in the literature as a problem, so the question was raised to employees where their response was recorded using a scale of significance. In order to measure this, a Likert rating scale was devised, and this rating scale ranged from very significant to not sure.

To determine if the respondents would welcome the introduction of a standardised system which will help with the detection and prevention of fraud, they will be asked if they would favour a system that is more transparent and accessible by all insurers? Telematics uses GPS data to compile information such as braking frequency, speed, and acceleration to measure a person's driving. Respondents will be asked if they feel making telematics equipment mandatory in motor vehicles would help in preventing motor claims fraud? These are both binary and open-ended questions. The respondents can answer 'yes' or 'no' and are then asked to 'please specify' their response and provide the researcher with an opinion based on their binary response.

3.5 Ethics

Responses to the questionnaire were voluntary and segmented to personnel with insurance claims knowledge. All respondents were advised that the research was for academic purposes and there was no information collected which would make the respondent identifiable. It was not mandatory for the participants to answers all question or further explain their response under the 'please specify' section of the question. Before consenting to undertake the survey, participants were advised of the topic title and that the survey should take an average of 5 minutes to complete. The participants were then given the option as to whether they were giving consent to continue with the survey or leave the site. Once participant consent was received, they could also withdraw from answering questions at any stage and were not obliged to complete the full survey (see appendix 7.1).

3.6 Data analysis (qualitative)

To evaluate the responses given to the survey by participants thematic analysis was used. Thematic analysis allowed the researcher to use coding to identify themes and patterns within the survey responses. The researcher looked for word and phrase repetitions by scanning primary data for words and phrases most used by respondents. Primary and secondary data will be compared for the researcher to discuss any differences between them. This will enable the researcher to identify issues which were not mentioned by respondents although the researcher expected them to be mentioned. Metaphors and analogues allow the comparison of primary research findings to phenomena from a different area and discussing similarities and differences (Business Research Methodology, 2021).

Once key themes were identified, they were examined to gain a further understanding of how the insurance claims industry approaches fraud prevention and detection.

The researcher was then able to identify patterns within the participant responses by using the software NVivo. The researcher downloaded the responses from Google survey to an excel document which was then uploaded to NVivo. NVivo computer software was used to collate the answers from surveys and help develop a theme. The main aim of NVivo was to find words which were present in all responses and thus then providing the researcher with a system of coding. This allowed the researcher to see if there were any commonalities occurring across insurance companies.

3.7 Limitations of the study:

This qualitative study was limited to employees within the claims department of the insurance company, and this ranged from claims handlers to underwriter. The study was limited to claims staff who dealt with general insurance claims. Some problems encountered in this study include:

- The length of time given to complete the study was short and does not represent very many insurance companies which are present in Ireland.

- Number of surveys conducted was limited as the researcher no longer works within the insurance industry and many insurance companies did not reply to emails to partake. The researcher also attempted to correspond with various insurers via the social media platform Twitter and received only one response back.

- As there was limited research in this chosen area, accessibility to books, articles and other literature sources commenting on how fraud is prevented internally within insurance companies was limited.

- The data may be biased as claims staff are trained to probe further in order to determine whether fraud has taken place or not, therefore they may already have a preconceived idea of who may be potentially committing fraud.

- The researcher was previously employed as an insurance claims handler and had many dealings with suspected fraudulent claims; therefore, the researcher may be biased in their opinions.

3.8 Summary

In this chapter the researcher has explained the way in which they conducted the research and survey. When participant responses are received the researcher advised of the approach, they would be using to analyse the responses received from the survey. The researcher explained who the chosen target audience was for participation and how many participants were required to complete the survey. All participants were informed of their rights to withdraw at any stage before undertaking the survey. Participants were also given the researchers details if they had any queries or questions. Any ethical issues and limitations of the study which the researcher was faced with were outlined.

4.0 Results

As outlined above the aim of the research is to determine could the insurer benefit from a system which is accessible by all insurance companies to check a person's claims history. Would the introduction of mandatory telematics equipment help in decreasing the number of fraudulent claims made under a motor insurance policy? The section will also discuss issues such as what the claims team believe their organisation could do to tackle fraud, does the organisation have an in-house specialist investigative unit and gather information on training which claims staff currently receive.

Once responses are received to the survey the researcher will then go on to present their findings. The researcher will explore the gathered qualitative data by making comparisons from the survey answers. The target audience for the survey were employees of insurance companies who work within the general insurance claims team. The survey consisted of 14 questions and was compiled using Google survey. To survey 10% of the general insurance claims market, the researcher needed to receive twenty responses to the survey. The link for the survey was distributed on various websites such as LinkedIn, Facebook, and Twitter. Once responses were received the Braun and Clarke (2006) system of compiling answers was used to analysis the responses.

This process used thematic analysis using six steps approaches

- Step 1: Become familiar with the data and re-read the answers given by participants.

- Step 2: Generate initial codes and the researcher will use theoretical thematic analysis to code each segment of data.

- Step 3: Generating themes which capture something interesting about the data or research question.

- Step 4: Reviewing themes where the researcher used NVivo to analyse the responses to the questionnaire.

- Step 5: Defining and naming themes by identifying what each theme is about and how they relate to each other.

- Step 6: Writing up.

This analysis helps to develop a theme which explains the respondents' experiences, perceptions, views, and representation. Using this technique themes will be drawn from responses given by participants which will allow the researcher to develop explanations (Clarke & Braun, 2013). The researcher will use inductive coding and will create codes based on the survey responses. The codes developed into themes and the researcher was able to identify areas where there was a recurrence of certain activities. Some of the themes identified included identifying words such as training and handling. This allowed the researcher to look at these areas more closely and analyse the type of training that the participants received in their workplace.

4.1 Coding

Whilst coding the response, the researcher found the words which were used most often. These words were then developed into certain themes providing the researcher with the capability to then look at this area in more depth. The researcher will outline below the main themes that they were able to dissect from the data received namely claims handling process, claims team division, fraud investigation and system improvements.

4.1.1 Claims handling process

Theme Identified	Key words identified
	Claims handler – assignment of cases

Claims handling process	Fraudulent claims – how these are identified
	Claims complexity – aids which help with assessment.

Claims handlers are assigned specific cases that they are required to see through from the start until the claims has been settled and is closed as stated by participant 5, who also went to state for question number 14 which was based on telematics equipment's and whether it would aid in preventing motor claims fraud it '*would make it easier for claims handler to assess complex claims and liability disputes*'

4.1.2 Claims team division

Theme Identified	Key words identified
	Inhouse teams – other sections of the claims department including fraud, quality teams
Claims team division	Management – random checks performed by team leaders or management
	Team members – regular meetings

The researcher found that within the claims team there was many divisions that made up the claims section. Some of participants had provided information on how they have internal fraud teams, investigations teams and quality teams and would pass on files to these other sections if they had noticed there was a possibility that the claimant was being less than forthcoming with the truth. Participant 1 stated that for the company they work in '*Depending on the size of the claim, and the advisor processing it, claims would regularly and sometimes randomly checked by quality teams, fraud department, team leaders, managers, telephony team members and the*

goal is always to decision /request additional information ASAP for the customer and the company (every time a team member touches a claim it costs resources and money).' In the organisation that Participant 20 work for they have '*informal talk among the claims team too about what we are working on.'*

4.1.3 Fraud Investigation

Theme Identified	Key words identified
	Improvement – where insurers can improve
Fraud Investigation	Detection – noting any potential fraud cases
	Investigating – how can a handler help to further an investigation.

When it comes to the area of fraud there are certain ways in which insurers identify fraud and try to prevent fraud. Participant 9 stated *'I think there will always be a need to improve how we deal with insurance fraud Throughout the industry there needs to be better highlighting and investigating of matters relating to fraud and any/all information be provided to Gardai in a timely manner to facilitate any investigation and subsequent prosecutions.'* Participant 3 stated that there *'Always room to improve in the area of insurance fraud.'* Participant 14 said '*Detecting insurance fraud - Identify multiple billing of same procedure, same date of service.'* When it comes to identifying fraud, two respondents mentioned red flags. Participant 7 mentioned what they look out for and that '*Its mainly down to looming for red flags and passing file to investigation team to look into*' Participant 9 said '*the more information available the better as it will all help paint a full picture of the case and subsequently help any criminal investigations.'* Participant 7 stated '*I think there should be a better focus on current scams, what they might evolve into and people of interest. They could also do tiers according to value*

of the scam - there can be too much focus on the higher value scams as opposed to smaller value ones that are more prevalent, eg bogus or exaggerated car crashes, whiplash etc.' Participant 6 stated that '*For a broker, fraud can arise in both the purchasing of a policy and in the processing of claims on a policy. Aside from the money laundering aspect, insurable interest and the validation of a physical item being insured needs to be addressed at inception stage or subsequent MTA's on the policy. Our red flag checks at this stage could be significantly strengthened to aid handlers in identifying potential fraud occurring. This is important as the broker can be considered as possibly complicit in any investigations if we are lax on our standards at inception'.*

4.1.4 System improvements and training

Theme Identified	Key words identified
	Current systems – unsuitable
System improvements and training	Additional training – given to identify trends

Apart from mandatory training respondents did not usually get any further training, participant 1 stated that in their organisation *'If a trend was noticed we would get additional training on what to watch for i.e. seasonal workers taking up temporary work during Christmas,'.* And also stated that *'there could be more communication / information sharing across the different functions. At the moment a staff member would have to take the imitative to ask about a specific thing'* For the current systems which are used by insurance companies' participant six stated *in ROI (Insurance link check) provides limited details and is not suitable to identify serial PI claimer.* Participant 8 stated *'Yes, there are lots of routines/ checklists that have to be completed, then reviewed by other team members as it progresses'* Participant 20 said *'If we an easily see trends from individuals that are regularly claiming or have had previous issues*

highlighted it may encourage staff to take a closer at certain claims, policies or any other cases that arise. The more information available the better as it will all help paint a full picture of the case and subsequently help any criminal investigations.'

4.2 Survey data analysis

The researchers first question was asked to identify how many organisations employees were willing to partake in the study and thus providing the researcher with an opportunity to compare insurers. The researcher received twenty-two responses of the twenty-two responses received one employee was each employed by AA, Axa and Cullen Insurance, two employees were employed by Wipro, four employees were from Royal Sun and Alliance (RSA) (one response was Sun which is part of RSA), four employees of Campion Insurance, five employees of Aviva insurance. one person put in medical claims instead of their employer's name and one did not identify their employer's name. One chose to not participate in the survey and one participant who was based in the United States had responded to the survey, as this participant was not based in Ireland their responses were not taken into consideration as part of the overall results.

The second question which was asked was regarding the participant's role, the researcher wanted to get the opinions of claims staff with varying roles within their organisation. Responses to this question included claims handlers, commercial account handler, underwriter and claims manager. Having responses from employees in various positions allowed the researcher to see was there much variation between what an underwriter would perceive to be important compared to a claim's handler perception.

The third question the researcher asked regarded the participants years of experience. The years' experience of respondents varied from one to thirty years. Five participants had over ten years' experience working in insurance claims. The researcher asked this question as an employee with longer service may provide more depth to their responses.

Questions 4, related to the priority companies placed on investigating, preventing, and detecting fraud, this was asked so the researcher could see how much of an emphasis is placed on claims handlers to watch out for these events by their organisation. Most responses were rated medium to high under each of the three priority headings. One of the participants from Wipro had low for the priority of their employer in investigating and preventing fraud whereas all other respondents had medium to high. In choosing how their organisation place priority on investigating fraud, 14 chose high and 5 chose medium, for preventing fraud 13 chose high and 6 chose medium and for detecting fraud 12 chose high and 8 chose medium. This shows that many organisations place a high emphasis on how their company tackles fraud.

Question 5, Could the way in which your organisation tackles fraud be improved? The researcher asked this question to find out if employees believe their organisation could do more to tackle fraud. The 'yes' answer for investigating, preventing, detecting fraud was highest in all three categories. Where the 'not applicable' answer was selected, the employees were from Campion insurance. All participants gave various responses on how their organisation tackles insurance fraud. With participant one giving incentives and been target driven as a reason. Participant seven and fifteen both stated the insurer needs to be able to prove fraud. Responses were very negative overall for this question where the participants felt their organisation could do more to deal with fraud. Participant number 6 provided that '*fraud can arise in both the purchasing of a policy and in the processing of claims on a policy'* and went on to further state

'*Our red flag checks at this stage could be significantly strengthened to aid handlers in identifying potential fraud occurring'*. Participant 22 stated that their organisations *'fraud team has greatly reduced in numbers over the last few years, an increase in resources to this area would see an increase in fraud detected etc.'* Participant 9 stated *'I think there will always be a need to improve how we deal with insurance fraud Throughout the industry there needs to be better highlighting and investigating of matters relating to fraud and any/all information be provided to Gardai in a timely manner to facilitate any investigation and subsequent prosecutions.'*
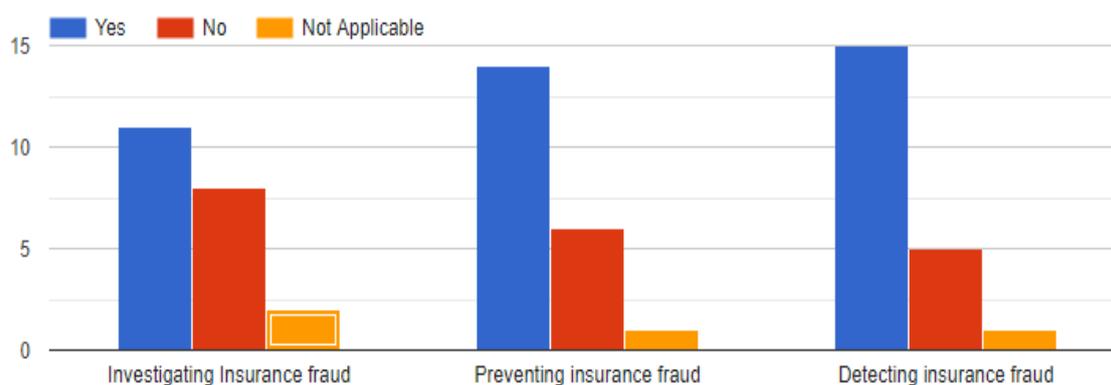

Figure 4: Can organisations improve how they tackle fraud? (Google Survey, 2021)

As can be viewed from the above graph and taken from the participant responses, claims handlers feel their organisations could be doing more to tackle fraud.

Question 6: How many cases of fraud conducted by your organisation have been taken to court in the following areas of insurance over the last 12 months? The researcher wanted to know how many fraud claims were been brought to court by insurance companies as there is a media emphasis on the amount fraud claims been brought to court by insurers. With travel insurance fraud there was 0-5, 11-15 and 15+ cases taken to court. For motor and home and contents insurance there was 0-5, 6-10, 11-15 and other received 0-5, 6-10 and 15+.
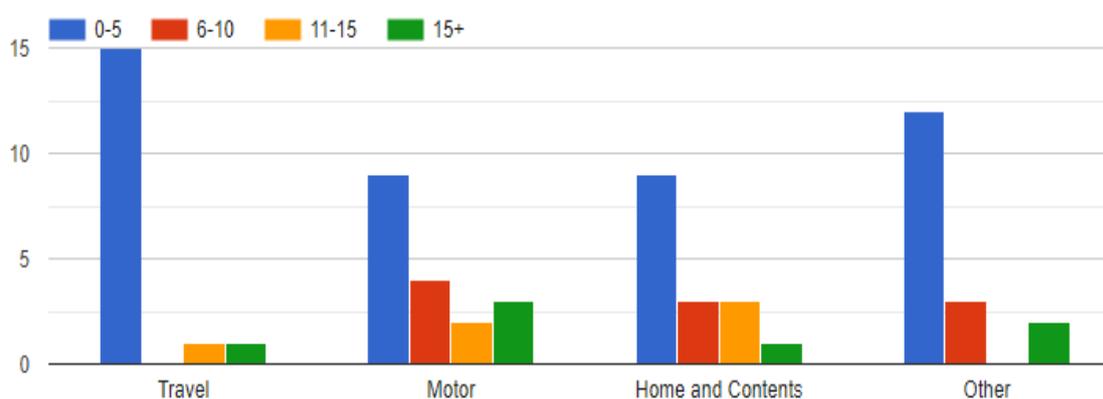
Figure 5: Fraud cases taken to court by an organisation over the last 12 months. (Google Survey, 2021).

The researcher was unable to provide a drop-down menu in google survey which would have allowed participants to provide specific numbers and therefore used a dataset which had numerical values in increments of 5. With this in mind, you can see from the graph above those insurers are continuing to detect fraud and continue to bring cases to court with some highlighted in green showing they have had 15 or more cases in court over the last year.

Question 7: Do you believe that non-disclosure of a previous claim is a significant problem when new proposals are made? The researcher asked this question so they could find out in non-disclosure was a problem that the claims team face. Most participants felt that non-disclosure of a previous claim was a very significant problem with 71.4% of participants choosing this option. 23.8% of participants felt it was moderately significant and one person stated it was not at all significant.
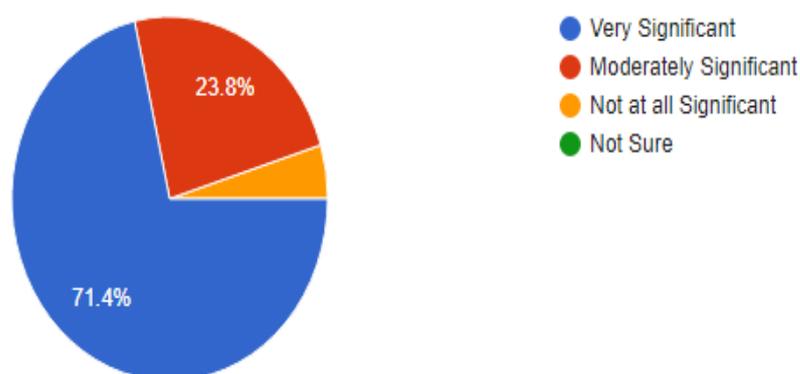
Figure 6: Significance of non-disclosure of a previous claim (Google Survey, 2021).

Overall non-disclosure of a previous claim seems to be a problem for most of the participants who were surveyed.

Question 8. Does your company have a special unit or department that tackles fraud? The researcher asked this question to see if many insurance companies have their own internal specialist units that aid in tackling fraud. The researcher then asked the participants who chose yes to provide the number of people who work within this section. 66.7% or 14 participants have stated their organisation has a specialist unit which tackles fraud with Axa having around 100 employees and both RSA and AA having around 50 employees in their respective departments. All other participants stated that their organisation had less than 10 people in these departments.
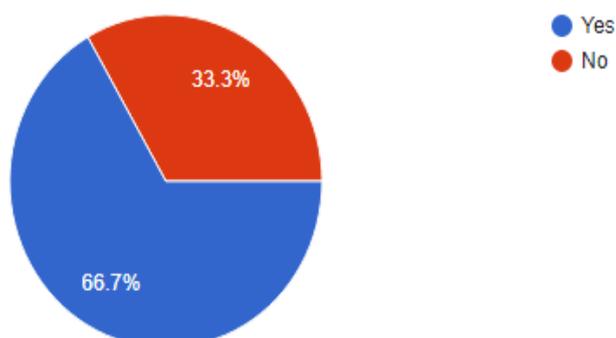
Figure 7: Organisations which have a specialist unit or department that tackles fraud. (Google Survey, 2021).

We can see that many insurance companies do have their own internal fraud and investigative teams the number of employees on these teams varies.

Question 9. Do any of the following staff routinely receive specialist training in detecting and dealing with insurance fraud? This question was further broken down into three categories - claims staff, underwriting staff and other staff. Participants were asked to briefly describe the training received. The researcher asked this question to find out if fraud training was undertaken regularly in the workplace so that staff know what areas are most susceptible to fraud. 'Claims staff' and 'underwriting staff' chose yes for routinely receiving specialist training with a higher proportion of 'other staff' not receiving training as routinely. Some of the training the participants stated they received included, Anti-Money Laundering (AML) courses and the insurance institute mandatory continuous professional development (CPD) which were mentioned by numerous respondents to be part of their training. Participant 6 stated '*other than AML training (mandatory) and CPC lectures, we are left to rely on our own experience.*' Participant 7 provided '*what to look out. It's mainly down to looming for red flags and passing file to investigation team to look into.*'
The responses from participants show that claims and underwriting staff have mandatory courses which they are required to complete as part of their training.

Question 10. Would you consider your organisations current system of receiving completed claims documents to be a time-consuming part of the claims management process? The researcher asked this as a yes/no question to find out if missing information on a claims form resulted in delays. In question 12 the researcher requested for further information to be

provided. Most respondents felt this was a time-consuming part of the claims management process. With 76.2% saying yes it was time-consuming compared to 23.8% who said no. Participant 14 went on to say that *'people can get confused while filling in documents, submitting them etc. (esp. if in an older demographic and not computer literate) so getting all the required documents can involve a lot of back and forth and additional phone calls or emails.'*
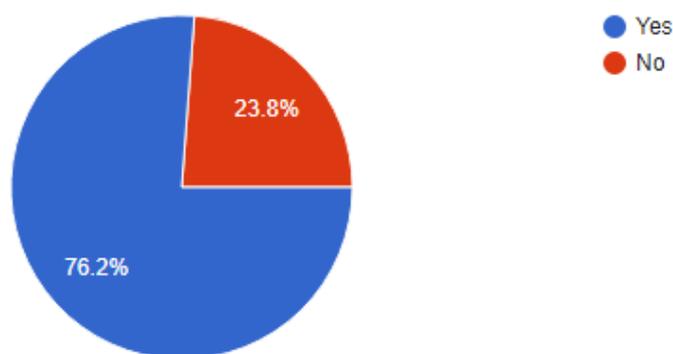

Figure 8: Is current system of receiving completed claims documents a time-consuming part of the claims management process. (Google Survey, 2021).

As provided by participant 14 there is sometimes additional work needed in order to get all information that is required to complete a claim.

Question 11. Are claims information systems well-designed for the appropriate identification of existing policies? The claims information system (also called the claims management system) is designed to manage all aspects of claims including coverage verification, reserving, monitoring litigation and complaints (Organisation for Economic Co-operation and Development (OECD), 2017). The researcher wanted to know if the system the organisation currently has in place for their claims staff is appropriate. This was very close

with 60% of respondents saying yes and 40% saying no. Participant 17 stated *'the UI for our information systems is hard for the end user to analyse and it can be overwhelming at times.'*
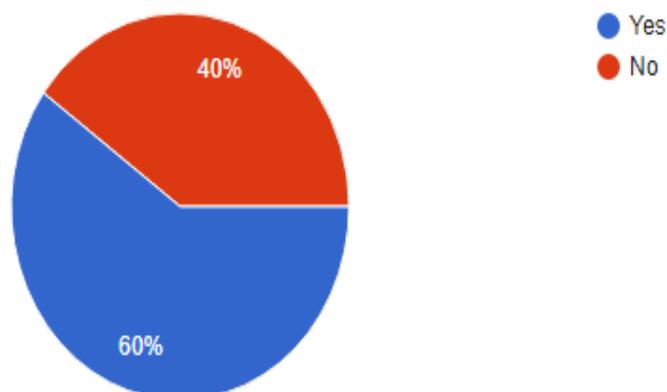

Figure 9: is the claims information systems well-designed for the appropriate identification of existing policies? (Google Survey, 2021).

The above data shows the information system some insurance organisations have in place is appropriate with some requiring a better system for their claims staff.

Question 12. Is the claim handling process appropriately monitored to bring a claim to its conclusion? This was a binary yes/no question. The researcher asked this question to find out how a claim is usually processed. A 95% majority was 'yes' to this question. Participant one gave the reason *'depending on the size of the claim, and the advisor processing it, claims would regularly and sometimes randomly checked by quality teams, fraud department, team leaders, managers, telephony team members and the goal is always to decision /request additional information ASAP for the customer and the company (every time a team member touches a claim it costs resources and money)'* and participant 22 who also works for Wipro stated that *'Several controls in place to ensure claims handled quickly n efficiently from start to finish'.* Three participants had advised that management would look at claims monthly in their respective organisation.
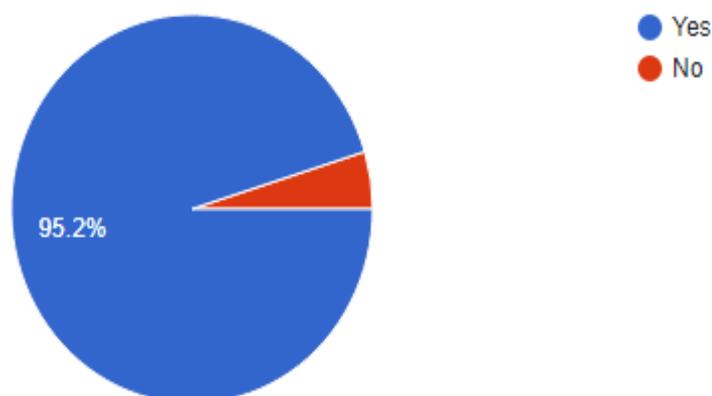
Figure 10: Appropriately monitored claims handling process to bring claims to its conclusion. (Google Survey, 2021).

This answer shows that the claims process is monitored appropriately to conclude a claim where organisations have varying processes in place where management will usually have an input in a claim.

Question 13. Do you think a system such as, the Claims and Underwriting Exchange (CUE) in England and Wales, which is accessible by all insurance companies and includes details on motor, home and personal injury/industrial incidents would help in reducing fraud?

The purpose of this question was to find out if insurance claims personnel would find it having access to a system which holds a person's full claims history would be beneficial to their job. There was an overwhelming 'yes' response to this question. 95% of participants surveyed believed a system such as the Claims and Underwriting Exchange (CUE) would help in reducing fraud. The participant who said no stated '*that it would be information overload and that it would be hard to prove if someone is committing fraud under the same insurance again*'. One participant stated that including Northern Ireland fraud data would be beneficial. The participants who did specify further were overall positive about having a system like the CUE. Participant 14 had very positive feedback stating '*It enables insurers to access details of*

incidents and it makes it harder to successfully commit claims fraud or misrepresent claims history. Ultimately, this helps to keep down the cost of insurance for honest policyholders.'
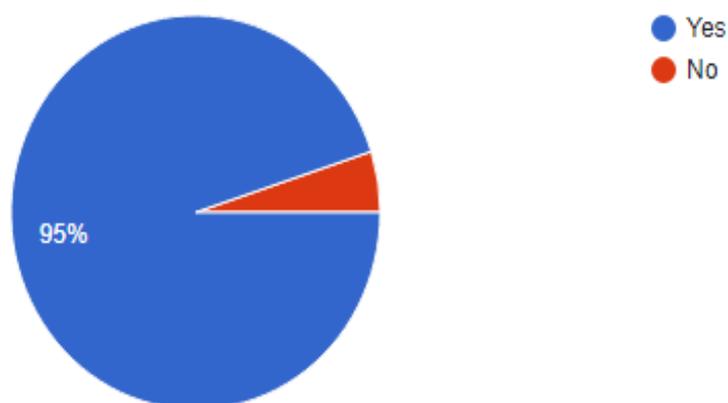

Figure 11: Adaption of system like the Claims and Underwriting Exchange (CUE) in England and Wales (Google Survey, 2021).

Insurance claims handlers would majorly welcome a system that holds all claims data which they can access and as stated by participant 14 would make it harder for a person to commit fraud.

Question 14. In your opinion, would making telematics equipment mandatory in motor vehicles help in preventing fraud in motor collisions? The aim of this research question was to identify if claims staff believed that having a system such as telematics would be beneficial. Many participants said 'yes' to telematics helping in motor insurance fraud with 75% in favour of making telematics equipment mandatory. Five participants said no but did not provide a reason as to why they chose this response. Of the participants who said 'yes', two believed telematics would be useful in helping with liability claims. One participant went to further state they believe that dashcams or other video recordings would help more than telematics but did state '*It would not mitigate the issue entirely, but it would certainly be a step in the right direction'.* Another participant stated that '*telematics equipment are fantastic investigative tools, and they are getting more advanced all the time.'*
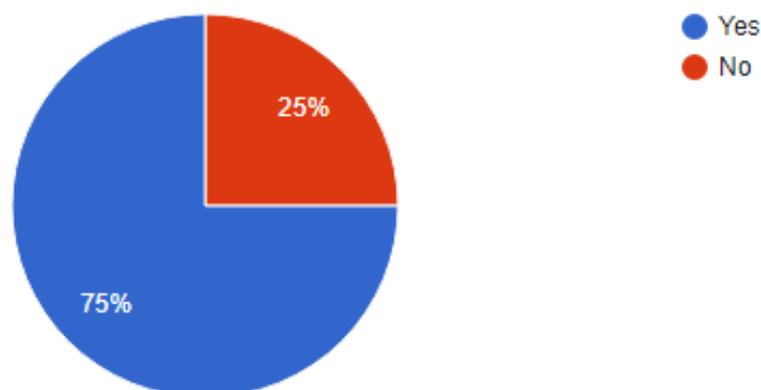
Figure 12: Results for mandatory introduction of telematics equipment in motor vehicles (Google Survey, 2021).

Participants were very positive about telematics equipment and a majority would welcome this system been introduced as mandatory to aid in the prevention of motor insurance fraud.

4.3 Summary

This section provides the results and findings from the twenty completed surveys which the researcher developed. The researcher attempted to find people who work within the claims department of insurance companies in Ireland. The responses were received from employees within seven different insurance companies in Ireland. Each survey participant had varying degrees of experience and were employed in different roles within their respective organisations. Using inductive coding when the researcher received all replies to the survey questionnaire the responses were coded, and thematic analysis was used to identify themes. These themes were used to identify areas which were mentioned the most and allowed the researcher to look at these sections more closely. The researcher then went on to analysis the responses which were provided to some to the open-ended questions which were asked to the survey participants. This allowed the researcher to fill any gaps they had found, namely

whether telematics and a new database which holds a claimants full claims history would be beneficial in detecting fraud.

5.0 Discussion

Insurance fraud accounts for 10% of all insurance claims pay-outs in Ireland. The primary purpose of this research was to find out if employees believed they receive enough training to detect and prevent insurance fraud and if new systems would be beneficial in helping with the detection of insurance fraud.

Respondents to the survey work within seven different insurance organisations in Ireland all had various roles within various insurance companies in Ireland and all had varying levels of years knowledge and experience. A majority of respondent felt that their organisation attached a high priority to investigating, detecting, and preventing insurance fraud. Overall, there was a mixed response in how their companies detected and prevented insurance fraud.

When participants respond to ways in which their organisations could deal with fraud some participants had mentioned that the burden of proof is on them as the insurers to prove that fraud has taken place. Apart from mandatory Anti Money Laundering (AML) and Continuous Professional Development (CPD) course training there does not seem to be any other form of training for the claims team. The results also show that outside of the claims and underwriting teams that in some organisation staff in other departments do not get any anti-fraud training. Mehmet & Ganji (2021) suggested that providing claims staff with training in the area of fraud prevention and detection would be an operational strategy which insurance companies should use.

Most participants felt their current claims management systems for receiving claims documents and checking existing policies was appropriate. Management is regularly involved in bringing claims to a close and do regular checks on claims within their organisations. Some

participants stated they have monthly meetings with management this is when management will decide on whether to close a claim or having a claim remain open.

An overwhelming amount of survey participants were in favour of a system like the Claims and Underwriting Exchange (CUE) which would include all claims a person has made. Currently in Ireland insurers do not have access to details pertaining to personal injury claims and pay outs which are awarded to an individual. The current system, insurance link, only holds details on home and contents and motor insurance claims. A system such as the CUE would hold a lot of information and would provide a lot more information than the current internal systems which are currently in use by insurance companies. The researcher can hypothesis from this that the claims team of insurance companies would appreciate a database system which is accessible by all insurance companies and provides them with a full claims history.

Telematics whilst used in Ireland is used for charging premiums on a policy and records information such as breaking, speed, location and distance travelled. Survey participants believed that telematics would be beneficial in dealing with motor fraud. Many participants stated it could help with liability and apportionment of blame in the event of an accident. Currently in Ireland it is the insurer who must prove fraud has taken place rather than the plaintiff showing they suffered injuries.

To combat fraud, it is necessary not only to detect it but also to provide evidence. This requirement entails the establishment of two elements that are hard to verify:

- Material evidence of fraud: misrepresentation or concealment on part of the policyholder,

- Evidence of the fraudulent intent on the part of the policyholder. The insurer must establish the bad faith of the policyholder and his/her intention to cheat.

The burden of proof lies on the shoulder of the insurer who claims and makes these allegations. The policyholder, whose good faith is presumed, remains on the defensive side (Atlas Magazine, 2017). Telematics could assist in reducing policyholders' premiums and reducing the likelihood of insurers having to make huge pay-outs in low velocity impact claims. Therefore, the researcher hypothesis that the introduction of telematics as a mandatory part of motor insurance would be helpful in the reduction of fraud and that it is a system which insurance claims teams would accept as been a constructive tool in the fight against fraud.

Some of the responses came from employees who work in Insurance brokers. Insurance brokers are intermediaries and therefore broker a deal between a policyholder and an insurance company. It is therefore worth noting that insurance brokers do not bring claims to court and the responses for anyone working within an Irish brokerage would be zero for example Campion Insurance staff would not be required to bring cases to court.

Fraud may occur at various points in the insurance process. For example, it may take place during the underwriting process if a customer misrepresents themselves in their application or deliberately conceals existing contracts with the same cover. From studies carried out by Insurance Europe (2019) it has been proven that fraud occurs most often during the claims process, this is usually when a customer exaggerates or makes a false claim on their policy, for example by fabricating supporting evidence such as repair bills or receipts for lost items (Insurance Europe, 2019). Non-disclosure of a previous claim was highlighted in survey question 7, by 71.5% of participants as being an issue they currently have within their organisation.

6.0 Conclusion

As there is no one standard definition of fraud and it also varies between insurers and the insurance institute it is open to interpretation. As detection methods increase so does the likelihood of fraudsters adapting to the new technologies, and they will eventually find new ways to circumvent the measures. Fraud is a problem that should concern everyone and not just the insurance companies. Fraud is very expensive and is costing the economy millions of euros every year. To account for the losses made on fraud claims insurer charge a higher premium to their other policyholders, this effectively means that policyholders are paying the price for fraud.

How insurers tackle fraud is an area that has been identified in this study where improvement is needed. One participant stated that it's not just at the claims stage where fraud occurs and its sometimes at the inception of a policy stage. The inception stage is when the policy is sold, if there is any suspicion that the policy is been taken out for unintentional purposes then the sales advisor needs to voice their concerns before allowing the customer to take out the policy. All staff and not just claims staff would benefit from more regular anti-fraud training. Training will help emphasis how important it is to watch out for certain activities.

The researchers' findings showed that participants responded 'yes' when asked is the current system for receiving claims documents time consuming. The current way of receiving claims forms is taking up a lot a time for the claims department. One participant stated, '*people can get confused while filling in documents, submitting them etc. (esp. if in an older demographic and not computer literate) so getting all the required documents can involve a lot of back and forth and additional phone calls or emails.*' There is a possibility here for

insurers to look at their current system of accepting claims forms and developing an approach which is more easily understood for all policyholders. Also, the development of a system which would advise the policyholder what supporting documentation is still outstanding and needs filing before the claim can be settled.

The development of a system where insurers can share information in a way that does not breach a customer's privacy would be beneficial and could include information for all claims including personal accident, health, motor, and home and contents. A system like the Claims and Underwriting Exchange (CUE) whilst expensive to develop at the start may prove beneficial in the long term. Fraud has a knock-on effect for all customers as fraud losses are accounted for in the premiums which are charged to compliant customers. A system like the CUE could help insurers to develop patterns in how people or criminals are developing new ways in which to commit insurance fraud. If this was available to all insurers, they would then be able to share information rather than keep information internal. The literature review identified that a system holding all claims information would be in breach of data protection laws, it is clear from the survey undertaken that the claims departments of insurance companies would welcome such a database. A system such as this would allow for checks for previous claims and therefore can check if a policyholder had failed in their duty to disclose any previous claims, they may have received an award for. This is a system which would benefit all insurers and would extend the amount of information they currently hold. It also helps in intelligence gathering and could therefore be used to identify trends and identify fraud patterns early.

Technology such as Artificial Intelligence (AI) can be used to interpret data and will find a pattern quicker than human detection can. AI can use information collected from old claims and compare it to new claims and check for similarities. As motor insurance is mandatory in

Ireland, equipment such as telematics could prove to be vital in decreasing and eradicating false liability claims in the motor insurance sector and could help with the apportionment of blame if a liability dispute arises. There was positive feedback from survey participants regarding telematics equipment. Other equipment such as dashcams could also prove vital as the insurer can then view this and decide based on what they have watched. The results of this survey question reiterate what has been stated in the literature review that artificial intelligence would be beneficial in helping deal with insurance fraud. Information held on telematics equipment could be useful in fraud investigation and not just useful for setting the cost of a premium.

Insurance fraud is not a new problem as is something that has been around for decades. This research focused on how insurance companies can do more to detect and prevent fraud. The results of the survey conducted by the researcher related to claims handlers who look at general insurance claims namely motor insurance, home and contents insurance and travel insurance claims, and if they would find new systems to be beneficial in helping them detect and prevent insurance fraud.

6.1 Recommendations

The current system of seeing how much was awarded in a personal injury claim shows on the policyholder's claims history and shows the amounts which was paid to a third party who claimed under the policyholder's policy it does not provide information on details such as how many times that third party has made claims for personal injury under other policies and the amounts they were awarded for prior injuries. A third party for general insurance purposes is a person who for example, was a passenger in the policyholder's vehicle when it crashed and they sustained injuries, or it could be a visitor to a policyholder's home that fell on a step and got injured for example broke their leg. Insurers uniting to have one data base could improve

their fight against fraud and using one system would be recommended. They would need to put pressure on the Irish government to make this happen as the government has recently decided against the plan to have one due to data protection issues. Insurers will need to develop a proposal which does not interfere with customers data protection rights and prove that it would be beneficial in helping with fighting insurance fraud.

The researcher had mentioned in the literature review about how claims are labelled, two of the survey participants had mentioned 'red flags' which they look for when dealing with claims. The researcher would recommend asking claims handlers what are the red flags they would watch out for and what is their system of coding for claims? This could be asked as an open-ended question if further research was to be carried out in survey format.

As the researcher found it very difficult to get participants to partake in the study, it would be advisable to seek guarantees from insurance companies that they will ask their employees to participate. Due to time constraints the survey sample size was very small it would be recommended to repeat the survey on a larger sample size. It would be advisable to try and get more participants from a larger variety of insurers (no employees were from insurance companies such as Zurich, Allianz, or Footprint Underwriting) to be able to do a comparison in how each insurer places priority on investigating, preventing, and detecting insurance fraud. This would also provide information on which insurers could improve on tackling fraud. As the participants represented a small amount of the insurance market it therefore makes it impossible to know which insurer has brought the least or the most amount of fraud cases to the Irish courts over the last 12 months.

Fraud is diverse therefore the research to prevent fraud should also be diverse. Further studies should adopt a qualitative approach with more in-depth interviews as interviews would be particularly important for further probing and would provide an explanation to the some of the responses received to the questions conducted for this research paper. The participants responses identified that receiving claim documents are time-consuming and the researcher would recommend asking for further information as to how they are currently received and how the process for receiving claims documents could be made more agile.

7. Appendix

7.1 Information Form

My name is Susan O'Brien, and I am currently an MBA student in Dublin Business School. This survey forms part of my dissertation project and I would be extremely grateful if you could participate in my study. You are being asked to take part in a research study on the criminal act of committing insurance fraud: the challenges facing insurers when detecting and preventing insurance fraud. This research aims to find out how insurers detect and prevent insurance fraud and what training they receive to deal with fraud.

What will happen

This study is for academic research with the aim of expanding the researcher's knowledge. This online questionnaire is anonymous, and data collected will be stored safely. You are not at any stage required to identify yourself by name. The responses provided will be retained for some time until the exam boards have released the researcher exam results.

Time Commitment

In this study, you will be asked to answer 14 questions which should take around five minutes to complete. Once completed the participant will have no further requirements.

Participants Rights

You may decide to stop being a part of the research study at any time without explanation required from you. You have the right to withdraw at any stage. You have the right to omit or refuse to answer or respond to any question that is asked of you.

Confidentiality

The data I collect does not contain any personal information about you except the company you work. The reason asked for your workplace is to provide a comparison to other insurance companies. This information will be used for the dissertation purposes only and will not identify any individual.

For Further Information

I will be glad to answer your questions about your participation in this study at any time and can be contacted via email: 10536966@mydbs.ie

Appendix I – Questionnaire

7.2 Questionnaire:

1. What is the name of the insurance company you work for?

2. What is your role?

3. How many years' experience do you have in your current role?

4. What priority does your company attach to the following?

	High	Medium	Low
Investigating insurance fraud			
Preventing insurance fraud			
Detecting insurance fraud			

5. Could the way in which your organisation tackles fraud be improved?

	Yes,	No	Not Applicable
Investigating Insurance fraud	□	□	□
Preventing insurance fraud	□	□	□
Detecting insurance fraud	□	□	□

Please give details

6. How many cases of fraud conducted by your organisation have been taken to court in the following areas of insurance over the last 12 months? (If none please state none)

	0-5	6-10	11-15	15+

Travel				
Motor				
Home and Contents				
Other				

7. Do you believe that non-disclosure of a previous claim is a significant problem when new proposals are made?

    Very Significant   Moderately Significant   Not at all Significant   Not Sure

    ☐   ☐   ☐   ☐

8. Does your company have a special unit or department that tackles fraud?

    Yes   No

    ☐   ☐

    If yes, please give number of staff in the department   [   ]

9. Do any of the following staff routinely receive specialist training in detecting and dealing with insurance fraud?

	Yes	No
Claims staff	☐	☐
Underwriting staff	☐	☐
Other staff	☐	☐

If yes, please briefly describe the training received

_____

_____

10. Would you consider your organisations current system of receiving completed claims documents to be a time-consuming part of the claims management process?

    Yes   No

☐   ☐

11. Are claims information systems well-designed for the appropriate identification of existing policies?

Yes   No

☐   ☐

12. Is the claim handling process appropriately monitored in order to bring a claim to its conclusion?

Yes   No

☐   ☐

(Please specify)

_____

_____

13. Do you think a system such as, the Claims and Underwriting Exchange (CUE) in England and Wales, which is accessible by all insurance companies and includes details on motor, home and personal injury/industrial incidents would help in reducing fraud?

Yes   No

☐   ☐

(Please specify)

_____

14. In your opinion, would making telematics equipment mandatory in motor vehicles help in preventing fraud in motor collisions?

Yes   No

☐   ☐

(Please specify)

Change in question 6:

How many cases of fraud conducted by your organisation have been taken to court in the following areas of insurance over the last 12 months? (If none please state none)

	Number
Travel	
Motor	
Home and contents	
Other	

How many cases of fraud conducted by your organisation have been taken to court in the following areas of insurance over the last 12 months?

	0-5	6-10	11-15	15+
Travel				
Motor				
Home and Contents				
Other				

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