# THE IMPORTANCE OF DATA SHARING TO MINIMIZE FRAUD IN THE INSURANCE INDUSTRY IN INDONESIA

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# ABSTRACT

Fraud in insurance causes a lot of financial losses, both for insurance companies and for policyholders. To handle this, one of the solutions offered is data sharing technology. Data sharing has great potential in business process innovation. Data sharing can mitigate fraud and has been widely used in other countries. This research wants to look further into the benefits of data sharing to minimize fraud in the insurance industry in Indonesia. This research method is qualitative with descriptive analysis. The conclusion of this research is that data sharing is useful for the insurance industry in Indonesia, but there are several challenges that need to be considered which are regulations, the readiness of insurance companies in Indonesia to carry out data sharing and the security of policyholder data.

Keywords: Data sharing, Fraud, Insurance.

## **INTRODUCTION**

Insurance has many benefits, including reducing the risk of death and improving health outcomes, where certain vulnerable groups, such as infants, people with disabilities, and people with the human immunodeficiency virus, benefit more than the general people. However, insurance companies are always vulnerable to fraud, because many people often commit dishonest acts in order to get easy money (Roriz, & Pereira, 2019). Fraudulent practices in the insurance industry often occur repeatedly. Therefore, detecting fraudulent claims is one of the biggest challenges facing the insurance industry.

Intentional misuse of insurance policies can result in major financial losses. The number of health insurance frauds is increasing yearly, causing enormous concern in the insurance industry (Liu et al., 2019). Insurance fraud is a multi-billion dollar problem (Moradi & Fateminejad, 2017). According to the Federal Bureau of Investigation (FBI), this insurance fraud causes an economic loss of approximately \$80 billion annually (Association of Certified Fraud Examiners, 2018). According to the Coalition Against Insurance Fraud (2015), insurance fraud costs Americans at least \$80 billion per year. The same thing is also estimated by the National Health Care Anti-Fraud Association (NHCAA) which states that there are financial losses of billions of dollars every year (Saldamli, 2020).

Fraud in insurance also harms consumers. The large number of false claims paid by insurance companies has increased premiums to compensate for these false claims, thereby harming the competitiveness and quality of services offered (Dhieb et al, 2020). In addition, fraud slows down insurance services as insurance companies take longer to verify the evidence provided and accept claims.

#### **Research Purposes**

This research aims to gain insight and understanding about data sharing in the insurance industry in Indonesia. This study is also conducted to serve as a recommendation.

#### **Research Questions**

- a) How is fraud handled in the insurance industry in Indonesia today?
- b) How do other countries utilize data sharing in handling fraud in insurance?

# LITERATURE REVIEW

# **Definition of Fraud**

Fraud means lying and misrepresenting facts (Moradi & Fateminejad, 2017). Simply put, insurance fraud occurs when someone tries to take advantage by violating the terms of an insurance contract (Roriz, & Pereira, 2019). Fraud, whether serious or minor, occurs at several points in the insurance cycle, namely at the application stage, at the claim stage, and at the final settlement stage. Fraud in health insurance, among others, falsifying information, concealing third-party liability, falsifying electronic bills, and so on (Liu et al, 2019). Predicting criminal fraud means finding indicators that are highly correlated with fraudulent activity.

There are two types of insurance fraud, namely serious fraud and minor fraud (Roriz, & Pereira, 2019). Serious fraud occurs when an accident is deliberately staged to claim money from the insurance company. Meanwhile, minor fraud occurs when an accident occurs naturally without any intention, but the insured client adds something more to his claim that has nothing to do with the accident, to benefit more from the accident (Roriz, & Pereira, 2019).

# **Data Sharing**

Data sharing has great potential for business innovation. Power and Power (2015) stated that insurance companies around the world could save huge amounts if data could be shared internally within the industry. The insurance industry itself has also shown interest in data sharing, motivated by the assumption that more data will provide more precise fraud detection models.

Data sharing is the process by which a company reuses data from another company, which is not a direct competitor, for its own business purposes (excluding contractor-subcontractor relationships) (Søilen-Knutsen & Tessem, 2022). This data is accessed free of charge or obtained for a fee or other compensation to the data provider. Insurance companies can use data ranging from individual insurance claims, overall insurance usage frequency, insurance activity types, individual behavioral data, and individual social media activity. Then, probability-based data analysis can be used for targeting suspicious cases.

#### **RESEARCH METHODS**

This is qualitative research with descriptive analysis. This research describes the importance of data sharing to minimize fraud in the insurance industry in Indonesia. This research is exploratory research to deepen the researcher's understanding. The data of the study are obtained from journals, books, newspapers, and articles.

#### **RESEARCH RESULTS**

# **Current Condition of the Insurance Industry**

Currently, the health insurance fraud suppression system requires a lot of labor and resources. Validating health bills and receipts requires a lot of labor and materials, and the validity of the receipts is difficult to guarantee with the current health insurance supervision

system. Investigating and collecting evidence of insured people's health has always been a challenge in the operation of health insurance institutions.

Criminals take advantage of the unconnectedness of health insurance systems in many cities, making fake receipts or bills evidence to claim insurance (Liu et al, 2019). In fact, electronic bills or receipts can be modified or used for several insurance claims. As many as 21% of bodily injury claims and 18% of personal injury claims, which are full refunds, are fraudulent (D.Corum, 2015). Among these false claims, the worst claims are those made by organized groups of fraudsters (Liang et al., 2019). Ambiguous or false information is often provided to health insurance companies to make them pay a number of false claims to policyholders (Saldamli, 2020).

It is very difficult to verify the validity of receipts and bills because the current health insurance system in Indonesia is not connected. Criminals always find their way into the insurance company system and exploit it. To prevent health insurance fraud, it is necessary to build a system to securely manage and monitor insurance activities by integrating data from all insurance companies. These frauds can be detected and prevented if the right data is collected, analyzed, and shared among insurance companies using data-sharing methods (Moradi & Fateminejad, 2017). Let us now discuss the requirements needed for data sharing to be implemented and the challenges data sharing may face.

#### **Examples of Countries Implementing Data Sharing**

#### Norway

Norway has already launched a data sharing project led by the Finance Innovation business cluster in Bergen, Norway (Finance Innovation, 2021). This ongoing project aims to adopt data sharing among insurance companies to prevent insurance fraud. Finance Innovation (FI) is an initiative from Bergen's financial industry, dedicated to establishing an innovation center in Fintech (Soilen-Knutsen & Tessem, 2022). FI commenced operations in early 2018, with one of its initial actions being the development of a series of projects (Soilen-Knutsen & Tessem, 2022). This cross-company data sharing enhances the efficiency of insurance fraud detection.

# Korea

In Korea, data provided by the National Health Insurance Database encompasses medical information for all citizens subscribed to health insurance (Ahn, 2020). The data collected by the National Health Insurance Database includes procedure and prescription data, as well as the medical information of all citizens who have registered for health insurance in Korea. The data encompasses insurance eligibility and premiums from birth to death for all citizens, hospital medical history, results of national health examinations, information on rare refractory conditions and cancer registrations, health benefit data, and elderly long-term care data since 2002 (Ahn, 2020). This data also provides information such as patient ID, age, gender, and income level. In cases where a patient files multiple claims, details like the start date of hospitalization, length of stay, treatment costs, medication, and diagnosis are also available according to respective billing units.

#### **Other countries**

In Europe, health data sharing mechanisms are mandated by the General Data Protection Regulation (GDPR) across the continent, involving data processors and controllers in facilitating desired outcomes, such as access to health data (Grundstrom et al., 2020). Meanwhile, Finland has conducted an empirical study documenting B2B data sharing. The results indicate that 49% of companies in Finland engage in data sharing, resulting in significant business advantage, particularly due to more optimal operations (Soilen-Knutsen

& Tessem, 2022). In the U.S., the non-profit Verisk Cyber Data Exchange aims to collect data from insurance companies willing to share information regarding premiums, coverage, and claims (MacColl et al., 2021). In the UK, insurance companies can also access NCSC's Cyber Security Information Sharing Platform, which brings together industry partners and the government for the exchange of intelligence on cyber threats (MacColl et al., 2021).

#### Associations

Associations also conduct data sharing. Industry associations and non-profit organizations like ORIC International and ORX have increased the number of operational risk data available for their members (MacColl et al., 2021). Several insurance companies also purchase substantial information on cyber claims through private cyber risk management providers, such as Advisen.

#### CONCLUSION

The insurance industry should embrace a more collegial approach to data sharing. The underlying assumption is that a larger dataset encompassing customer coverage and claims will improve the capability to reveal fraud. A platform must be established to enable cooperation between insurance companies and governing bodies, including regulators and policy-makers, in order to render big data analysis as transparent and accurate as possible. First, the insurance industry must bring together pertinent stakeholders, including relevant regulators and insurance companies, to establish a work team to discuss the operations of data sharing within the insurance industry. Governments and insurance regulators should also reevaluate existing insurance regulations or laws that prevent insurance companies from collectively sharing data regarding virtual insurance incidents and claims, including confidentiality requirements in contracts. It is equally important to evaluate how this data will be collected, analyzed, and shared to protect the interests of individuals, organizations, and society. To achieve this, the process should be streamlined so that sharing can be conducted as efficiently as possible, making fraud detection easier.

#### SUGGESTIONS

In general, numerous issues must be addressed by companies, entrepreneurs, and business communities before they can fully harness the potential offered by data sharing in the insurance industry. Currently, exchanging data among competitors in the insurance industry is not an easy feat, primarily due to a lack of trust in how others handle data, but also owing to competition law and other regulations (Soilen-Knutsen & Tessem, 2022). Furthermore, in the era of big data, it is crucial to recognize that a higher quantity of data does not necessarily equate to improved data quality and analysis. There needs to be a more systematic approach to processing the acquired data.

It is important to note that the relationship between insurance companies (both public and private) and policyholders, who represent the general public, is built on trust (Ho, Ali, & Caals, 2020). Research on data sharing guidelines issued over the past two decades highlights the autonomy and privacy of the public, as well as the quality and management of their data, as three of the most important issues for the public (Blassime et al., 2018). Privacy is also identified as an issue related to data sharing or the disclosure of personal information (Ho, Ali, & Caals, 2020). Furthermore, the level of control over personal information and an individual's trust are also identified as ethical issues arising from the use of personal data about one's life collected (European Economic and Social Committee, 2017).

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**Received:** 08-Nov-2023 Manuscript No. AAFSJ-23-14171; **Editor assigned:** 10-Nov-2023, PreQC No. AAFSJ-23-14171 (PQ); **Reviewed:** 24-Nov-2023, QC No. AAFSJ-23-14171; **Revised:** 04-Dec-2023, Manuscript No. AAFSJ-23-14171 (R); **Published:** 23-Dec-2023