1 – Overview of Insurance Operations

**1 – Insurer Goals and the Constraints on Achieving Them**

Like any other business, insurers operate with specific goals in mind – but they also often face constraints that many industries do not have. These constraints can originate from an insurer’s internal operation as well as its external environment.

**Insurer Goals**

**An insurer generally sets five major goals:**

* **Earn a profit**
* **Meet customer needs**
* **Comply with legal requirements**
* **Diversify risk**
* **Fulfill duty to society**

**Earn a Profit**

The profit goal is most commonly associated with proprietary, or for profit, insurers. *Cooperative insurers also aim to earn a profit, but do not consider this goal to be the primary reason they are formed. Cooperative insurers are insurers owned by their policyholders and usually formed to provide insurance protection to their policyholders at minimum cost. Mutual insurance companies, reciprocal exchanges, and fraternal organizations are examples of cooperative insurers.*

Insurers earn money by charging insureds a premium for the insurance contract, or policy. To meet the contract terms of payment of covered losses and to fulfill regulatory requirements, insurers take a portion of their surplus, or premiums not immediately needed to pay operating expenses, and invest it in stocks, bonds, and real estate. These investments produce income in the form of interest, dividends, and when sold, investment gains. This additional income can be further invested to pay future covered losses, expand the insurer’s operations, or be returned to the insurer’s investors.

*A proprietary insurer must earn a profit to provide a return on investment made by its stockholders. A proprietary insurer can only attract capital as long as its profits are comparable to or better than similar insurers*.

For cooperative insurers, one source of capital is funds from policyholders, usually in the form of premiums. Growth of surplus derived from underwriting operations is another. Profits are returned to policyholders in the form of dividends or are contributed to surplus to help ensure continued solvency and protect against unforeseen catastrophic losses. Under certain circumstances, a cooperative insurer can obtain additional capital by issuing surplus notes. These notes can usually be repaid only from profits, so gaining capital from them often depends on the insurer’s anticipated profitability.

Whether cooperative or proprietary, an insurer can increase premium volume through policy sales, which in turn can be aided by marketing efforts. Additionally, when an insurer’s underwriting operation evaluates risks effectively – avoiding risks that will require excessive loss payments – and prices insurance products appropriately, premium volume increases, resulting in greater profits.

**Meet Customer Needs**

To attract customers, an insurer must provide the products and services those customers seek – and do so at a competitive price. This involves determining what customers need and what price is competitive and then finding the best way to satisfy those needs.

When insurance customers suffer a loss, they can be upset or under considerable stress. Consequently, the insurer must provide quick and professional assistance, which requires well-trained, customer focused personnel and automated support systems.

**Meeting customers’ needs, however, may conflict with the profit goal. In some cases, offering high quality insurance at a price that the customer can afford may not generate the profit that the insurer needs to attract and retain capital. Providing training, operating automated call centers, and maintaining current information technology can also be costly and conflict with achieving the profit goal in the near term***. But the long-term benefits of these expenditures can reduce costs and help reduce premiums, and the improved customer service can create a competitive advantage by encouraging policy retention and new business*.

**Comply With Legal Requirements**

Legal compliance is necessary for an insurer to be considered a responsible corporate citizen, and it promotes an insurer’s good reputation in the business community. Therefore, it can enhance the insurer’s ability to attract capital and customers; conversely, lack of compliance may lead to fines and penalties. It **can create a conflict between the profit goal and the customer needs goal**.

Compliance with state regulations is one of an insurer’s greatest responsibilities. Unfortunately, compliance comes with expenses for filings, record keeping and accounting, and legal activities. Additional expenses are incurred for participation in assigned risk plans, Fair Access to Insurance Requirements (FAIR) plans, and government-required insolvency funds. *These expenses increase the cost of insurance and can create a conflict between the profit and customer needs goals*.

**Diversify Risk**

Diversifying risk is a goal for property-casualty insurers because of the potential for catastrophic losses. Example an insurer with a high concentration of policies along the coast of Florida.

By spreading risk over a wider geographic area and multiple types of insurance business, insurers can help protect themselves from catastrophic losses. *This goal complements the insurer’s goals of earning a profit and fulfilling it duty to society.*

**Fulfill Duty to Society**

At a minimum, the obligation for an insurer to fulfill its duty to society demands that the insurer avoid causing public harm. As responsible corporate citizens, many insurers go well beyond that minimum.

*Many insurers contribute funds, and sometimes they volunteer employees’ time, to public service* organizations. In addition, many insurers establish employee benefit plans that provide for the current and future well being of their employees. *Benefits such as medical insurance, disability insurance, retirement plans, employee assistance programs, and numerous other benefits help employees and retirees use personal resources to meet their needs and help minimize the use of public resources*. Insurer’s participation in philanthropic activities and employee *benefits improves employees’ job satisfaction and emotional well-being.*  While fulfilling their duty to society through these activities, insurers strive to maintain a well-qualified, knowledgeable staff, which promotes the profit and customer needs goals. *However, the required funds for these programs competes with these goals, so insurers must balance the use of funds to best meet their disparate goals*.

**Constraints an Achieving Insurer Goals**

An insurer’s path to achieving its goals is not always clear, as several internal and external constraints might prevent it from achieving its goals.

**Internal Constraints:**

* **Efficiency – Inefficient insurers are at a disadvantage when competing with efficient ones. This competitive weakness might prevent them from meeting their profit and service goals, which can lead to an inability to meet humanitarian or societal goals. Inefficiency can also prevent an insurer from adequately meeting its customer’s needs and, in extreme cases, can lead to insolvency and consequent failure to meet legal and regulatory goals.** An insurer’s lack of efficiency may be caused by poor management, insufficient capital, outdated technology and inability to keep up with growing influence of data analytics, inability to adapt to change and other causes.
* Expertise – *considerable expertise is required to successfully operate an insurer. This is especially true for insurers in niche or specialty markets. Can prevent an insurer from making a profit or meeting customer’s needs and cause the insurer to fail to attain any of its goals*.
* Size – a small insurer may have more challenges than a large insurer in terms of available resources. Large insurer can take advantage of economies of scale and may find it easier to update technology or reach additional markets. They can invest more in market research and product development. *One advantage of smaller insurer is that it can be more nimble, allowing it to respond quickly to emerging trends or changes in the external insurance environment*.
* Financial resources – Insufficient financial resources can pose a serious threat to an insurer. When financial resources become strained, insurers are unable to effectively train staff, make new capital investments, or reach new markets.
* Other Internal Constraints – Examples include lack of name or brand recognition, or a damaged reputation.

External Constraints:

* **Regulation** – Insurance operations are closely regulated, extending from incorporation to liquidation and encompassing most activities in between. Insurance regulation is complex, extensive, and varies by state. Federal regulation adds another layer of complexity. Products that can be offered in one state may not be approved in another state. Regulation imposes a major constraint on insurer, requiring significant personnel and financial resources that can inhibit the insurer’s ability to achieve its profit goals
* **Rating agencies** – financial rating agencies, such as AM Best, Standard & Poor’s, and Moody’s rate insurers based on financial strength as an indication of an insurer’s ability to meet policyholder obligations. To maintain a highly rated status, insurers typically must maintain capitalization levels in excess of the minimum amounts required. Favorable ratings attract and retain customers.
* **Public opinion** – public opinion about the insurance industry as a whole can inhibit individual insurers from meeting goals. While many customers are satisfied with their insurers, high profile issues can lead to a negative perception of the insurance industry.
* **Competition** – Competition in the insurance industry is driven by the number of insurers in the marketplace, advances in technology, and customers seeking innovative products. Pricing and availability of insurance products fluctuate based on the amount of capital available to the industry, and form many years the industry experienced fluctuating underwriting cycles (or market cycles), referred to as hard or soft cycles.
* **Economic conditions** – insurer’s investment operations can be affected by economic downturns, potentially causing investment income to fall and thereby limiting insurers’ policyholders surplus for meeting the demands of customer’s claims. Inflationary cycles can affect insurers, as well, affecting the costs of insurance losses through increased medical, construction, and other loss related costs.

**2 - Classification of Insurers**

Insurance is a system under which participants (such as individuals, families, and businesses) make payments in exchange for the commitment to reimburse for specific types of losses under certain circumstances. Insurers, which are organizations within the financial services industry must be classified in various manners.

*The insurance organization or the entity that facilitates the pooling of funds and payment of benefits is called an insurer. Participants in this mechanism, called insureds, benefit through reimbursement of covered losses that occur, reduction of uncertainty, additional services provided by the insurer to reduce the frequency or severity of losses, and financial protection against legal liability for damages to others*. Additionally, insureds can benefit from the potential availability of credit from lenders, which may help enable them to purchase property. Because the risk of loss to property is transferred to the insurer, lenders are willing to loan money to insureds with greater confidence that their loan will be repaid.

*The principal function of every insurer is the same: the acceptance of risk that other transfer to it thought the insurance mechanism*. This task is divided into core operations consisting of underwriting, claims, and marketing, which in turn are supported by several other functions.

**Property-casualty insurers can be classified in these four ways:**

* **Legal form of ownership**
* **Place of incorporation**
* **Licensing status**
* **Insurance distribution systems and channels**

**Legal Form of Ownership**

* **Proprietary Insurers** which include Stock insurers, Lloyds of London and American Lloyd’s, Insurance Exchanges
  + **Stock insurers are the most prevalent types of proprietary insurer in the United States. These insurers are owned by their stockholders. By purchasing stock in a for profit insurer, stockholders supply the capital needed to form the insurer or the additional capital the insurer needs to expand its operations. Stockholders expect to receive a return on their investment in the form of stock dividends, increased stock value, or both. A proprietary insurer must earn competitive profits to raise the capital needed to operate.** Stockholders have the right to elect the board of directors, which has the authority to control the insurer’s activities. The board of directors creates and oversees corporate goals and objective and appoints a chief executive officer to carry out the insurer’s operations and implement the programs necessary to operate the company.
  + **Lloyd’s of London – is technically not an insurer. However it does provide the physical and procedural facilities for its members to write insurance. It is a marketplace, similar to a stock exchange**. The members are investors who hope to earn a profit from the insurance operations.
    - American Lloyd’s associations are smaller than Lloyd’s of London, and most are domiciled in Texas because of the favorable regulatory climate. Most of these association where formed or have been acquired by insurers. Like most investors of Lloyd’s of London today, members (called underwriters) or American Lloyds are not liable beyond their investment in the association.
    - An insurance exchange is a proprietary insurer similar to Lloyd’s because it act as an insurance marketplace. Exchange members underwrite any insurance or reinsurance purchased on the exchange. Members belong to syndicates and delegate day to day operations to the syndicate manager.
* **Cooperative Insurers** which include Mutual Insurers, Reciprocal Insurance Exchanges, Fraternal Organization, Other Cooperatives (Captive insurers, Risk Retention Groups, Purchasing Groups) and Others (Pools, Government Insurers)
  + **Mutual Insurers constitute the largest number of cooperative insurers and provide low-cost insurance to their policyholders, who are owners of the insurer. Because a traditional mutual insurer issues no common stock, it has no stockholders. Its policy holders have voting rights similar to a stock company, and like stockholders, they elect the insurer’s board of directors that appoint officers to manage the company**. Some profit is retained to increase surplus, and excess profit is usually returned to policyholders as dividends. Under certain circumstances, a cooperative insurer can obtain additional capital by borrowing funds using surplus notes. These notes can usually be repaid only from Profits.
  + **A reciprocal insurance exchange is simply called a reciprocal, consist of a services of private contracts in which subscribers, or members of the group agree to insure each other. The term “reciprocal” comes from the reciprocity of responsibility of all subscribers to each other. Each member is both an insured and insurer**. Because the subscribers are not experts in running an insurance operation, the contract with an individual or organization to operate the reciprocal. This manger is the attorney-in-fact. Reciprocal Insurance Exchanges are the only unincorporated insurers permitted in most states.
  + Fraternal organization resemble mutual companies, but they combine a lodge or social function with their insurance function. They write primarily life and health insurance.
  + Cooperative insurers include captive insurers, risk retention groups and purchasing groups
    - When a business organization or group of affiliated organization forms a subsidiary to provide all or part of its insurance, the subsidiary is known as a captive insurer, or captive. This is sometimes referred to as “formalized self-insurance”. The captive may also be formed to cover losses that other insurers will not cover at any price. Captive insurers can take several forms, their ultimate purpose is to fund the losses of their owners. Some states have enacted legislation to facilitate the formation and operations of captive insurers within their jurisdictions, while others do not permit it. Legislation has also allowed risk retention groups and purchasing groups to form. These cooperatives can be stock companies, mutual, or reciprocal exchanges. They are usually organized so that a limited group or type of insured is eligible to purchase insurance from them. These types of insurers are becoming more significant in the evolving insurance marketplace.
* **Other Insurers include pools and government insurers**
  + **A Pool consists of several insurers**, not otherwise related, **that join together to insured loss exposures that individual insurers are unwilling to insurer**. These loss exposure present the potential for losses that either occur to frequently or are too sever for individual insurers to accept the risk.
    - Such risks may be a nuclear powerplant, because no single insurer is willing to assume such tremendous liability, nuclear energy pools were formed. These pools allow many members insurer to spread the losses among members. Additionally, the pools by reinsurance from nonmembers to increase their capacity.
    - Pools can be formed either voluntarily or to meet statutory requirements**. The operate either as a syndicate or through reinsurance.** A syndicate pool issues a joint (or syndicate) policy to the insured, listing all pool members and specifying the part of the insurance each member is responsible.
    - Many pools are required by law. Virtually all states require some kind of pooling arrangement to provide auto liability for drivers who cannot obtain such insurance in the standard market. Similar pools are required for workers compensation. Fair Access to Insurance Requirements (FAIR) plans are required by at least half the states. These pools provide property insurance to qualified property owners who are unable to obtain coverage in the standard market. Beachfront and windstorm insurance pools are residual market plans similar to FAIR plans.
    - The federal government offers several forms of insurance. One of the largest property insurance programs it offers is the National Flood Insurance Program (NFIP), which is administered by the Federal Insurance Administration under the Federal Emergency management Agency (FEMA). Most property policy exclude flood coverage because of the catastrophic potential.
    - The federal government provides a government “backstop” insurance program through the original Terrorism Risk Insurance Act (TRIA). TRIA ensures that commercial property owners can obtain reasonable and predictably priced terrorism coverage by specifying that the federal government will share the risk of loss from foreign terrorist acts. To qualify under TRIA, a terrorist act must be certified by the government. Federal assistance becomes available when such losses collectively exceed $5M and when participating insurers pay a specified amount in related claims.
    - Most states require motor vehicle owners to have auto liability before registering their vehicles. However, drivers with poor driving records or with little driving experience may have difficulty obtaining such insurance from private insurers. To make liability available, all states have implemented automobile insurance plans through a residual market. The cost of operating such plans is spread among all private insurers selling insurance in the state.
  + *The Rise of Insurtech Companies* – Emerging technologies have led to the growth of insurtech (that is, the coupling of insurance and technology companies. These companies can assist traditional insurers with offering innovative new products and services. Examples:
    - Micro Insurance - firms offering insurance to economically disadvantage and other underserved segments of the population
    - Firms that facilitate the use of sensors – internet of Things (loT) – enabled devices and other data capture technology to help insurers and brokers assess and price individual risks
    - Peer-to-peer insurance – Firms that use web-enabled platforms to facilitate the formation of self-selected risk pools who members (usually friends, relatives or like minded individuals) pool premiums and collectively pay for member’s insured losses
    - On-demand insurance (also knowns as need-based Insurance) – Firms that use web-enabled customer interfaces and sensor technology to offer coverage that allows near-total customization
* **Place of Incorporation** - The second classification of insurers is by place of incorporation and includes domestic, foreign, and alien insurers.
  + Insurance is regulated at the state level. Therefore, **a domestic insurer is incorporated within a specific state, or, if not incorporated, is formed under the laws of that state. An insurer is said to be operating in its own domiciled state when it is doing business in the state in which it is incorporated or was formed.** Foreign insurers are a domestic insurer that is licensed to do business in states other than its domiciled state. Alien insurers are incorporated or formed in another country.
    - Reciprocal insurance exchanges are the only unincorporated insurers permitted in most states. Insurance exchanges and Lloyd’s organizations are permitted under law in only a few states.
* **Licensing Status** – The third classification of insurers is by licensing status. **An insurer’s state license authorizes it to sell insurance in the state. A license indicates that the insurer has met the state’s minimum standard for financial strength, competence, and integrity. A license indicates that the insurer has met the state’s minimum standards for financial strength, competence, and integrity.** 
  + An Admitted insurer is an insurer that has been granted a license to operate in a particular state. An unlicensed insurer (non admitted insurer) has not been granted a license to operate in a given state.
  + Producers for primary insurance (except surplus lines brokers) are licensed to place business only with admitted insurers. Licensing status is also important for purposes of reinsurance.
* **Insurance Distribution Systems and Channels** – the fourth classification of insurers is by their insurance distribution systems and distribution channels -that is the method used to deliver insurance products to the market place. Most insurers use one or more of *these insurance distribution systems: Independent agency and brokerage marketing systems; Direct writer marketing system; Exclusive agency marketing systems.*
  + **Common Distribution Channels to promote products and services as well as to communicate with existing and prospective insured are: Internet; Call Centers Direct Response; Group Marketing; and Financial Institutions**.

**Definitions:**

Surplus lines Broker – a person or firm that places business with insurers not licensed (non-admitted) in the state in which the transaction occurs but that is permitted to write insurance because coverage is not available through standard markets.

Independent agency and brokerage marketing system – an insurance marketing system under which producers (agents or brokers), who are independent contractors, sell insurance, usually as representatives of several unrelated insurers.

Direct writer marketing system – an insurance marketing system that uses sales agents (or sales representatives) who are direct employees of the insurer.

Exclusive agency marketing system – an insurance marketing system under which agents contract to sell insurance exclusively for one insurer (or for an associated group of insurers)

Distribution channel – the channel used by the producer of a product or service to transfer that product or service to the ultimate customer.

**3 – Measuring Insurer Performance**

Insurers use measurements that are specific to their industry to determine their success at meeting established goals. Measuring the performance of an insurer involves determining how successful the insurer is at meeting established goals, including these:

**Meeting Profitability Goals**

An understanding of how insurers make a profit is crucial to understanding how they meet their profitability goals. Like any business, an insurer generates income, or profits, when its revenue exceeds its expense. The primary sources of revenue for insurers are insurance premiums and investment income.

When determining expenses, insurers face a special challenge compared with other organizations. The largest portion of insurer’s expenses involves losses that will occur in the future and that are, by definition, more difficult to project than past or current expenses. Estimating these future expenses and setting aside the funds to pay for them is done through reserving.

Estimating insurer profitability is generally accomplished by examining premiums and either underwriting performance (underwriting gain or loss) or overall operating performance (gain or loss from operations).

**Premium and Investment Income**

An insurer’s profits depend heavily on the premium revenue the insurer generates. Premiums are the amounts the insurers charge insureds for insurance coverage. Insurers use rates based on the insured’s loss exposures to determine the premium to charge for insurance. Insurers must charge premiums to have the funds necessary to make loss payments. In fact, an insurer’s total revenue (premiums and investment income) must equal or exceed the amount needed to pay for losses and to covers its costs of doing business. An insurer’s profitability must consider the volume of premium the insurer writes. Investment profit also depends, in part, on premium revenue that creates the funds used for investment.

Insurance operations generate substantial amounts of investable funds, primarily from loss reserves, loss adjustment expense reserves, and unearned premium reserves. Loss and loss expense reserves are especially significant for insurers that write liability polices because of the long delay inherent in the liability claim handling process generates very large loss reserves.

**The two indicators of insurer profitability based on premiums are premium growth issues and the rate of growth that is sustained over time**. Premium growth is not always a positive indicator of an insurer’s success. An insurer should achieve premium growth by writing new policies rather than depending solely on insurance rate increases or inflation. Premium growth, or lack thereof, must be evaluated in light of current market conditions. During periods of intense competition, significant growth is difficult to achieve. Rapid premium growth can be undesirable meaning inadequate premium levels or lax underwriting standards*. To determine profitability, an insurer should consider whether growth resulted from a competitive advantage, relaxed underwriting, inadequate insurance rates, or a combination of these factors.*

Evaluating the rate of premium growth sustained over time helps determine insurer profitability. Establishing reasonable rules by which the measure the adequacy, inadequacy, or excessiveness of premium growth is difficult. Growth that is slower than the industry average usually indicates a problem. Likewise, a growth rate that is substantially higher than the average might indicate changes that could be unfavorable long term.

**Underwriting Performance**

An insurer’s underwriting performance can be measured in terms of net underwriting gain or loss. This is determined in an insurer’s earned premium minus its incurred losses and underwriting expenses for a specific period. Incurred losses include loss adjustment expenses, and underwriting expenses include acquisition expenses, general expenses, taxes and fees. Because net underwriting gain or loss ignores investment income (or investment losses) and investment expense, it represents the extent of the insurer’s profit or loss derived strictly from the sale of insurance products.

The formula for calculating net underwriting gain or loss can be express as :

**Net underwriting gain or loss = earned premiums – (incurred losses + underwriting expenses)**

|  |  |  |
| --- | --- | --- |
| **Profitability Ratio** | **Measures ---------------------->** | ***Underwriting & Investment Results*** |
|  | **Loss Ratio** | **Incurred Losses including LAE ÷ Earned premium** |
|  | **Expense Ratio** | **Underwriting expenses ÷ Written premiums** |
| ***<100 profit Over = loss*** | **Combined Ratio (trade basis)** | **Loss ratio + Expense ratio** |

**Overall Operating Performance**

An alternative way to measure and insurer’s profits is through overall results from operations. An insurer’s overall gain or loss from operations is its net underwriting gain or loss plus its net investment gain or loss from a specific period.

After an insurer pays losses, expenses, and taxes, and reserves money to pay additional incurred losses, the remainder is net operating income, which belongs to the company owners. The owners (stockholders or policyholders) may receive a portion of this remainder as dividends. The amount that is left after dividends are paid is added to the policyholder’s surplus. The increase in policyholders’ surplus enables the insurer to expand its operations in the future and provides a cushion against catastrophic losses.

To obtain an accurate picture of an insurer’s profitability, it is important to analyze the overall gain or loss from operations for several years because any insurer might have a single unprofitable year that is offset by a pattern or profitability over a longer period.

Insurers may lose money on their underwriting activities (when the combined ratio is more than 100%) and yet still generate a profit on investments. Ideally, the investment profit is more than enough to offset the underwriting loss so the insurer has an overall gain from operations and the policyholder’s surplus grows through time and generates a suitable return on equity for the owners.

|  |  |  |
| --- | --- | --- |
| Performance | Operating Ratio (should be < 100%) | Combined ratio - Investment income ratio |
| Most Complete ratio | Investment Income Ratio | Net Investment income ÷ Earned premiums |
| **Comparison** | **Return on Equity** | **Net income ÷ Owner’s Equity (policyholder surplus)** |

**Estimation of Loss Reserves**

One of the biggest problems in measuring insurer profitability arises from errors in estimating loss reserves. Loss reserves are generally the largest liability in the insurer’s balance sheet and can have a significant effect on the insurer’s overall profitability. Insurer establish loss reserves not just for reported claims, but also for losses that have occurred but that have not yet been reported (known as incurred but not reported [IBNR”] losses), for losses that have been reported but for which established case reserves are inadequate (known as incurred but not enough recorded [IBNER] reserves), and for claims that have been settled and then reopened.

Errors in estimating outstanding loss amounts, by either underestimating or overestimating the final cost of claims, can distort the insurer’s reported profits. Therefore, in the long term, if an insurer does not have adequate reserves, it may not have the funds necessary to pay claims. If reserves are initially underestimated and subsequently increase, then net income and policyholder’s surplus will decrease when the underestimate is recognized. This can result in the reduced premium revenues and the lack of funds to pay for losses. Conversely, if the loss reserves are overestimated, based on the artificially inflated reserve estimates, the statutory limits on premiums could be written may be less, and the premiums may e inflated for new and existing risks. Although reserves can be decreased later, in the interim, those artificial results can cause the insurer to be less competitive in pricing. A pattern of under reserving or over reserving may ultimately lead to the insurer’s insolvency.

**Meeting Customer Needs**

Determining how well insurers meet customer’s need is difficult because insurers are more likely to hear from customers who believe they have not been treated fairly.

**Complaints and Praise**

All insurers received complaints, and each complaint should be evaluated. In some instances, a real problem exists that the insurer should address. In other instances, customer hold expectations that the insurer had not intended to fulfill.

**Customer Satisfaction Data**

Many insurers emphasize a customer focus to maintain and raise levels of customer satisfaction with the insurer’s products and services. Insurer often use response cards and phone surveys to determine whether customers feel property treated. Insurers can also conduct customer focus groups or interview to determine how well a new or existing product meets customer’s needs.

**Insurer’ Retention Ratio and Lapse Ratio**

Two particularly telling measurements of customer satisfaction are the retention ratio and the lapse ratio (sometimes called the cancellation ratio). The data for developing these ratios are found in internal statistical reports. The retention ratio is the percentage of expiring policies that an insurer renews, and can be measured by policy count, premium volume, or both.

**The lapse ratio is calculated by dividing the number of policies that lapse during a period by the total number of policies written at the beginning of that period**.

**# of policies that lapse ÷ total number of policies written = Cancellation ratio**

These ratios can indicate the number of policies a company is losing, whether because of a service or price issue or some other issue (such as loss to competition).

**Insurer-Producer Relationships**

Insurers that market products through independent agents and brokers usually view this network of producers as their customers, in addition to the ultimate insurance customer. These insurers recognize that many other insurers are available to the producer as and that a competitive marketplace exists within their industry. As is the case for customer, insurers can survey or meet with producers to measure their satisfaction with the insurer or to reveal unserved needs the insurer might be able to meet.

**State Insurance Department**

Several state insurance departments tabulate complaints they receive and publish lists showing the number of complaints received for each insurer. The number of complaints might indicate one insurer’s customer relations success or failure relative to other insurers in the industry. And are a good indication of an insurer’s success or failure in meeting legal requirements.

**Consumer Reports**

Consumers Union periodically surveys its membership to determine its level of satisfaction with the performance of auto and homeowners insurers. The results are published in that organization’s magazine, Consumer Reports, including a list of the most satisfactory and least satisfactory insurers as indicated by the survey responses.

**Meeting Legal Requirements**

**An insurer’s success or failure in meeting legal requirements is indicated by the number of Criminal, Civil, and Regulatory Actions taken against the insurer. These actions are automatically brought to the attention of management and should be evaluated carefully to see whether they result from an consistent disregard of legal requirements.**

***The state has a Regulatory oversight comity called Market Conduct Regulation****. This State insurance department monitor the treatment of insureds, applicants and claimants. They oversee four insurer operational areas: Sales and advertising, underwriting, ratemaking, and claim settlement*.

**Most states publish a listing of regulatory actions against insurers**. This information can be useful in showing how one insurer’s performance in this area compares to its competitors.

**Financial rating agencies provide summary information about insurer financial strength in the form of a financial rating.** The rating agencies review all financial information presented in an insurer’s balance sheet and financial statements, including an outstanding legal actions involving the organization.

**Meeting Social Responsibilities**

Meeting social responsibility is the most difficult of the major insurer goals to evaluate. No standards exist for judging an insurer’s performance in this area, and little information on an individual insurer’s performance is publicly available. Many insurers use their websites to indicate their participation in home and workplace safety programs, support of community projects, and involvement in other social programs.

Another possible indicator is the benefits that an insurer provides for its employees. Some insurers have begun to promote family-friendly policies within their organization to assist employees with balancing work and family responsibilities.

**Many insurers contribute to associations that do research and raise public concerns for safety. Contributions to medical, welfare, and educational institutions and programs are another indication of humanitarian efforts and social responsibilities**.

Additionally, “green” initiatives are emerging for many insurers as they recognize their responsibility to preserve the environment. Recycling and reusing materials used in the production of policies, etc.

**4 – Functional View of Insurance**

The functional view of insurance examines the many and varied function an insurer preforms as it conducts its business operations.

To carry out the operations of an insurer, many people are needed, all of whom perform specific functions. A function generally describes a distinct type of work or an aspect of operations or management requiring special technical knowledge. **An insurer’s core functions are typically marketing and distribution, underwriting, and claims.** These core functions represent the lifespan of the insurer’s business operations, form getting the business (marketing and distribution), to pricing (underwriting), and then to administering the business (claims).

Insurers perform additional functions that are designed to support these three core functions. An insurer carriers out these additional functions to facilitate risk transfer, to promote efficiency, and to meets its financial and nonfinancial goals.

All of the functions included in theses categories interact to meet an insurer’s goals. Some insurers may perform only some of these functions, while others might include additional functions.

**Core Functions**

**Although insurers may use varying organizational structures, the 3 core functions exist within the structure of a typical insurer**.

* **Marketing and Distribution** – determining what products or services customers want and need, advertising the products (communicating their value to customers), and delivering them to customers. The goals of marketing and distribution must be balance with other insurer goals.
* **Underwriting** – once the marketing and distribution has developed a relationship with potential customers, it is the job of underwriting to determine whether and under what conditions the insurer is willing to provide insurance products and services to the potential customer. The goal of underwriting is to write a profitable book of business for the insurer, which supports the insurer’s profit goal. Underwriting serves both insurers and insurance buyers by helping the insurer avoid adverse selection (the tendency for persons with the greatest probability of loss to be the ones most likely to purchase insurance)
* **Claims** – An insurance policy is a promise to make a payment to, or on behalf of, the insured if a covered event occurs. The purpose of the claims function is to fulfill the insurer’s promise. To that end, the claims function is staffed by employees who are trained n the skills necessary to evaluate and settle claims and negotiate or litigate the settlement of claims by or against insureds through the claim handling process. The claim handling process is designed to achieve a fair settlement in accordance with the applicable insurance policy provisions.

**Supporting Functions**

To support the core functions of marketing and distribution, underwriting, and claims, insurers provide a variety of supporting functions, including these **5 supporting functions: risk control, premium auditing, actuarial functions, reinsurance, and information technology**. They can be provided through 3rd parties as well. These functions are not only necessary to the efficient operation of insurers, but are also used by a variety of other risk financing organizations, such as captives, pools, risk retention groups, and self-insurers.

* **Risk Control** – Provides information to the underwriting function to assist in selecting and rating risks. Also works with the commercial insureds to help prevent losses and reduce the effects of losses that cannot be prevented. Insurers may also market their own risk control services as a stand-alone product to 3rd parties who have not purchased policies from the insured.
* **Premium Auditing** – although premium for many types of insurance is known as guaranteed in advance the premium is variable for some lines of insurance (workers compensation), and cannot be calculated until the end of the policy period. Some policies use rating variables such as sales or revenue to calculate premiums.
* **Actuarial** – Actuarial functions include calculating insurance rates, developing rating plans, estimating loss reserves, and providing predictive modeling services. The actuarial function also conducts sensitivity analysis to determine the financial security of the insurer. They coordinate with the accounting and functions in developing reports for regulators to ensure the insurer is adhering to all regulatory requirements
* **Reinsurance** – When an insurer accepts a risk that is larger than its willing or able to support, it can transfer all or part of that risk to other insurers through reinsurance transactions.
* **Information technology** – the IT function provides the infrastructure that supports all of an insurer’s internal and external communications. Insurers use information technology to conduct

**Other Common Functional Areas**

In addition to the core and supporting functions, insurers perform a host of other functions. There are 6 common functional areas that may exist within the structure of an insurer or that may be outsourced to an external organization:

* **Investments** – insurer’s investment operations enable it to earn investment on income on the funds generated by its underwriting activities. This investment income enables the insurer to reduce the premium that it must charge in exchange for the risk it assumes. Liability involves longer term claims and therefore longer-term investments. Policies such as property need to be supported by more liquid and short-term investments.
* **Accounting and finance** – primary responsibility of the accounting and finance function are to ensure that the organization has funds to meet its obligations and to fairly and fully disclose the financial position of the insurer in conformance with GAAP.
* **Customer Service** – can include an array of responsibilities that vary among insurers, such as billing, claims services, underwriting support, agency relations, technology support.
* **Legal and Compliance** – provides legal counsel, support, and service to other functions within the insurer and ensures that statutory and administrative requirements are met.
* **Human resources** – involves the selection, training and dismissal of employees
* **SIUs** – established to combat insurance fraud, which includes any deliberate deception committed against an insurer or an insurance producer for the purpose of unwarranted financial gain.

**5 – The Digitization of Insurance**

The singe term resonates with increasing frequency throughout risk management and insurance: Disruption. And it’s not just an empty buzzword. Here’s how Insurance Thought Leadership’s chief innovation officer, Guy Fraker, distills the essence of the importance of innovation in the industry.

The world is moving toward prevention – crash prevention, injury prevention, illness prevention. The entire industry of risk management and insurance is to clean up the unintended consequences from not preventing. And so the history of insurance has evolved over the past 100 years in the exact opposite direction of where the technologies are taking society. That gap is only going to continue to grow.

Disruption entails equal parts threat and opportunity at every link in the insurance value chain. For every development that seemingly reduces the industry’s reliance on human services – a chatbot that potentially replaces a claims representative, for example – a break through reveals potential revenue streams and the promise of new markets, like an app that connects impoverished populations with economical coverage options.

**The best way to navigate this is to understand the rapid evolution of the three fundamental building blocks of the digitization of insurance: Data Capture, Data Storage, and Data Analytics**.

Data Capture is the internet of things (Sensors)

Data Storage (Cloud computing/Blockchain)

Data Analytics (artificial intelligence/machine learning)

Traditional Risk Management decisions enhanced through insights derived from big data.

**Data Capture**

Data has always been everywhere. Any recorded piece of information that fortifies decision making is data. Today, however, there are more sources of data, more ways to record and transmit it, and more way to use it than ever before. Much of the data is generated and ultimately leveraged on devices connected through the Internet of Things (loT). loT is the mobile devices that are able to connect to the internet and other devices such as Ring Doorbell, jet engines to transmit diagnostic information to the cockpit, or phone pairing with your car.

**The internet’s chief purpose has been to facilitate the use of centralized websites to connect people with information or with another. The loT allows people to interact with devices and for those devices to meaningfully interact with each other without human intervention**. And can facilitate Claims.

The ability of devices connected to the loT to collect data about their surroundings and immediately transmit it to other devices or to people lies at the heart of ongoing shift from risk transfer **to risk prevention** that is fundamentally changing the insurance industry and roles of those who work in it.

**The effectiveness of an insurer’s underwriting function has always been largely reliant on the availability of quality data about the risk being evaluated. So it’s easy to see how the volume of data the LoT produces could radically improve the process’s efficiency and precision**. Chubb Limited Chairman and CEO Evan Greenberg on how the widening availability of data is changing underwriting data collection at one insurer.

Right now, if you’re a small business, to underwrite you, we ask you about thirty questions. For Chubb, in the next eighteen months, that’ll come down to about seven questions, because we can just scrape the answers from the data that is publicly available…. Eventually, we’re going to have to ask you two questions: What’s your name and what’s your address? And we’ll be able to figure out the rest to underwrite.

**In addition to leveraging loT – generated data to streamline data collection, underwriters can use a set of standards attributes (variable) to evaluate personal and commercial auto policyholders**. However, when they can identify additional attributes that affect or reflect potential frequency and severity of loss*, they can use that information to create more refined classification systems that produce more accurately priced accounts. The use of telematics presents such an opportunity: new attributes that correlate with auto losses are identified, and auto insurance classes and rates are refined*.

**Using telematics could empower the insurer to better segment drivers into rating classifications. How? After a vehicle is monitored through telematics for a certain period, the insurer could present the insured with a new rate that takes actual driving experience into account. The telematics data helps provide the insured with a more precise rate that accurately reflects the loss exposure**.

**Data Storage: The Blockchain**

The decision making value of data produced by smart products, the lotT, and other data capturing technology can be determined by its volume, velocity, and veracity – more and faster is not necessarily better. Cloud computing enables the storage and sharing of vast amounts of data. But what if there was a way to ensure that the data used for risk management analysis was from a trusted source and independently verified? That is the premise underlying the data storage and sharing medium known as the blockchain.

Think of the blockchains as a virtual distributed ledger that maintains a dynamically updated list of data records (blocks). These records are not actually recorded in the ledger, however, until the veracity of data within them is confirmed and verified through a consensus process called mining. This verification process removes intermediary validation and establishes trust without the use of centralized authority. After a block is confirmed and the data within it is verified through mining, the block is time stamped and added to the preexisting blocks in the chain – hence the term “blockchain”. The block chain is encrypted and protected against tampering and revision.

The myriad of risk management ramification to the blockchain are a by-product of the medium’s immutability, security, transparency, scalability, and ability to facilitate the sharing of verified, quality data. Here are some examples of its effects on the insurance value chain:

* Insurance products, pricing, and distribution – the supply chain for insurance is ripe for change through the implementation of blockchain. The use of smart contracts could alter the types of products insurers offer, such as parametric insurance or insurance that could be implanted in transactional purchases. Blockchain can also help make smaller insurance policies covering specific days or actions, more efficient to offer, thereby increasing availability while decreasing costs.
* Underwriting, risk management, and reinsurance -risk registries and data-sharing capabilities could increase through blockchain – enabled peer-to-peer insurance models and the like. Shared industry ledgers could also come into play allowing interinsurer claims to be settled quickly.
* Policyholder acquisition and services – Onboarding new customers and clientele could be much easier for insurers who adopt blockchain. With third party requests for insurer information removed from the process, new customer data would be verified almost immediately. The insurance life-cycle documents could be easily updated, and any repetition of data entry and verification would become avoidable.
* Claims management – The use of smart contracts, reliant on triggering events rather than indemnification, could simplify the traditional claims management process. If the industry establishes a communal ledger via the blockchain process, that could also help to quicken the handling of multilayer settlements and fraud investigations.
* Finance, payments and accounting – Integrating blockchain into how an insurer works could make international payments easier to process, creating greater efficiency when dealing with matters of subrogation.
* Insurance regulation and compliance – By giving regulators the ability to keep an eye on insurance variables throughout their jurisdictions, blockchain would help free resources for individual departments of insurance. If could also help create an industry wide proof-of-insurance ledger, rather than putting the onus on individual insureds to prove that they have insurance.

**Data Analytics: Advanced Analytics**

Insurers are already using data analytics across various function, including underwriting and claims. While applications such as chatbots (which mimic human speech) are taking over some basic claims and customer services functions, insurance professionals who embrace changes and enhancements are positioned to help the industry and traditional roles evolve.

Auto insurance has been influenced by data analytics. In the auto insurance field, telematics devices track driving habits; dashboard cameras detect distracted driving; and front facing computer-vision technology identifies, analyzes, and then prevents risks. The data gained by telematics programs can help insurers more accurately price their products and classify insureds. Awareness that drivers the insurer had previously classified as preferred are actually standard can help the insurer more accurately classify insureds.

Data analytics has allowed underwriters to segment policies and rates based on attributes that might have once been considered obscure, such as geospatial data. More precise underwriting of property exposures can be critical to insurer’s success as climate and environmental changes become more common.

Workers compensation has been influenced by data analytics that enable the identification of which workers are likely to be injured, which injuries are likely to be expensive and which claims are fraudulent. Such as the ability to flag a claim because of complications related to an individual’s health and recovery can reduce the cost and the risk of injury.

In personal and commercial lines claims, techniques such as network analysis and clustering (essentially, finding similar claims and claimants) identify and prevent fraud. These methods allow claims departments to keep up with the ever-changing techniques of fraudsters rather than relying on traditional fraud indicators.

While the claim process benefits from the automation of analytics, claims professionals with skills are still necessary to property use this data. Emphasizing the need for competent risk management and insurance professionals, Michael Skiba, VP of counter fraud strategies for inform, remarked:

I think many carriers are aware that the future of fighting fraud is all about data: data management, inclusion and integration, and at the core of this data is the technology that surrounds it. But we can’t forget the “people” aspect of what is to come in fraud fighting. Many companies are failing to recognize that they need people who have the ability to leverage the power of this data and, furthermore, have some degree of comfort using technology to assist with fraud-fighting efforts.