

**Problem Statement – Automation of Facultative Underwriting Process**

1. **Title:**

Automation of Professional Indemnity Insurance Quotation with AI

1. **Introduction**

**Context and Background:**

Reinsurance is a vital mechanism in the insurance industry, allowing insurance companies to manage risk by transferring portions of their liabilities to other insurers/reinsurers. This process helps stabilize insurance markets, ensures solvency, and enables insurers to underwrite policies they might otherwise deem too risky.

Facultative reinsurance involves individual, case-by-case agreements between the ceding insurer and the reinsurer. Each policy or risk is separately negotiated and underwritten, allowing for tailored coverage.

Professional indemnity insurance (PII), also known as professional liability insurance (PLI) or errors and omissions insurance (E&O), is a type of insurance coverage designed to protect professionals and businesses against claims made by clients or third parties for financial losses resulting from negligent acts, errors, or omissions in the performance of professional services. This insurance typically covers legal Défense costs, and any damages awarded, up to the policy limits.

**Importance of the Problem:**

This problem is essential as it enables faster processing of facultative quotation requests received from our business partners. This automation will ensure that the business partners are able to get quotes in time.

1. **Problem Description:**

We are currently manually analysing proposals forms and other relevant documents submitted for Professional Indemnity Insurance quotation requests. The manual process is time consuming, tedious and delays submission of quotes.

1. **Current state:**

We are currently using an excel template where data is input manually to generate a quote. This process is time consuming, prone to errors, and often lead to delays in submission of quotes.

1. **Desired state:**

To automate reinsurance underwriting quotation to achieve operational excellence, mitigate risks, and deliver superior value to our business partners by optimizing efficiency, accuracy and customer satisfaction.

1. **Objectives of Professional Indemnity Quotation Tool**

**Main Objectives:**

1. Improve our turnaround time in generating and submission of quotations.
2. Improve the accuracy of quotes done and possibility of the terms quoted materializing to business
3. Develop innovative solution to enhance the efficiency of quotation of professional indemnity insurance for professionals across various industries.
4. Implement AI to save on time spent on doing quotations
5. Utilize human labour accordingly- More time to be spent on following up on quotes done and ensure they materialize to new business from our partners
6. Automate repetitive quotation request for PI for various occupations. (Other classes of business)
7. **Stakeholders:**

* Business Partners: Improved customer experience, efficiency and speed and accuracy for the quotes submitted.
* Underwriters – It will eliminate the manual work, and underwriters will focus more following up quotes done, solicit new business and customer relationships
* Management and shareholders: They are responsible for setting strategic goals, allocating resources, and ensuring that underwriting automation aligns with the organization's overall objectives and priorities.

### **Common Professions that Require Professional indemnity liability insurance**

* **Consultants and Advisors**: Management consultants, business advisors, financial advisors.
* **Medical Professionals**: Doctors, nurses, therapists, and other healthcare providers.
* **Legal Professionals**: Lawyers, solicitors, and paralegals.
* **IT Professionals**: Software developers, IT consultants, cybersecurity specialists.
* **Design Professionals**: Architects, engineers, graphic designers

1. **Input Data:**

AI bot will consume data from the following main documents.

* Dully filled proposal form
* PI rating guide.
* Copy of Audited financial statements – Analyse financial accounts submitted to determine financial soundness of the firm/individual. If the firm/individual is profit making, then proceed to quote if loss making decline to provide terms.
* Current operating license from the professional regulating body

1. **Step by Step main procedure to be followed by AI to pick minimum required rating parameters for PI Quotation from the dully completed PI proposal form (PDF text, emails, rating guide) to be provided in the lab**

* Name of cedant
* Name of broker
* Period of cover- Annual
* Number of business partners
* Number of qualified/unqualified staff employed
* Estimated annual fee/income
* Limit of indemnity (cover limit)
* Occupation for the insured
* Deductible/Excess applicable

**WORKFLOW CHART FOR PI QUOTATION**

**Extensions**

**Optional -To be charged premiums if the client requests**

* Loss of documents – 10% max LOI @surcharge of 10% of basic premium
* Dishonesty of Employees - 10% max LOI @surcharge of 10% of basic premium
* Incoming/Outgoing partners - 10% max LOI @surcharge of 10% of basic premium
* Libel and Slander - 10% max LOI @surcharge of 10% of basic premium

**Retroactive cover – Optional**

* 12 months – 40% of annual premium
* 24 months – 65% of annual premium

**AI to use the above information to generate terms and conditions (Quotation)**

* Quotation template – In pdf format

**11. Potential Benefits and conclusion.**

Automating the professional insurance quotation process will bring numerous benefits, enhancing efficiency, accuracy, customer satisfaction, and overall business performance.

* **Faster Quotation Process**: Automation significantly reduces the time required to generate quotations, enabling quicker responses to client inquiries.
* **Streamlined Operations**: Automation eliminates manual steps, reducing bottlenecks and ensuring a smoother, more consistent workflow.
* **Reduced Human Error**: Automation minimizes the risk of mistakes that can occur with manual data entry and calculations.
* **Consistent Application of Underwriting Rules**: Automated systems consistently apply underwriting criteria, ensuring uniformity and fairness in the quotation process.
* **Optimized Resource Allocation**: Human resources can be reallocated to more strategic tasks, such as complex risk assessment and customer relationship management.
* **Handling Higher Volumes**: Automated systems can handle a larger number of quotations simultaneously, allowing the company to scale operations without a proportional increase in costs.
* **Adaptability to Market Changes**: Automation can quickly adapt to new products, regulatory changes, and market conditions, ensuring the company remains competitive.
* **Faster Response Times**: Clients receive quotations more quickly, improving satisfaction and increasing the likelihood of securing business.
* **Enhanced Communication**: Automation can include personalized communication and follow-up, providing a more tailored client experience.