**ABSTRACT**

The main foundational block of health insurance industry is to estimate the future events and measure the associated risk/value of these events, hence it is needless to say that predictive analytics is used widely to determine the risk, insurance premium and enrich overall customer experience. The health insurance industry has always been a slow-moving industry when it comes to adopting the data analytics practices into its business models. With the advent of advanced data analytics technologies, it has become important more than ever to take advantage of such sophisticated analytics to accurately assess and predict the insurance premiums for the insured. Thus, one of the important tasks for health insurance companies is to determine the policy premiums. By using predictive modelling, the insurers can determine the policy premium for the insured based on their behaviors which are indicated by attributes such as age, BMI (Body Mass Index), smoking habits, number of children etcetera. This determination of premiums based on the data collected for an individual helps insurance companies in enhanced pricing, underwriting and risk selection. Additionally, it helps in making better decisions, understanding customer needs and be fair to the customers.

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**With Regards and Gratitude**

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