**Introduction**

Two main commercial banks in France merged then BNP Paribas, a global bank giant, was established in 2000. This newly developed company owns over 700 branches throughout 85 countries and 205 thousand employees. Except for the basic retail banking business, BNP Paribas also specializes in personal insurance, private banking, securities and capital management. Till 2008, before the global financial crisis, BNP Paribas had earned a net profit of 18.2 billion Euros via its banking business and total asset had increased by 20% compared to that in 2000. BNP Paribas luckily escaped the credit crisis during 2008-2009 and its net profit remained upward in recent years. According to Bloomberg’s data, BNP Paribas reported a net profit of 3.0 billion for the year of 2008, 5.8 billion for 2009 and 6.0 billion for 2011. Cardif is an insurance company belonging to BNP Paribas Assurance which owns 9000 employees and over a hundred subsidiaries in 36 countries. Cardif has reported a gross premium of 27.5 billion and net profit of 1.2 billion Euros, increased by 8.5% and 4.6 respectively.

Under the situation that the insurance industry is faced with an increasingly market competition, companies must take actions to attract customers to survive in the competitive world. Except for providing discounts, another approach is to improve work efficiency and accelerate claim process, by which insurance companies can both cut expenses and attract applicants. Generally, claims management always need different levels of check before a claim can be approved and payments can be made. However, the problem is the population that waiting for the insurance service has increased to an extremely large amount and thereby sometimes insurance institutions like BNP Paribas even have to deal with thousands of claims per day. Therefore, with the given information of customers, BNP Paribas Cardif need a statistical model to judge whether a claim should be approved and paid soon or it still require additional information, namely, a model helps accelerating the claim process. In this report team Tyrell offers a feasible model to help judge the claims.