3. Scope and Limitations

3.1 scope of initial release

In the initial release, the program will be able to

* correctly calculate option prices over various trading desk (FX, Fixed Income, Derivatives, etc.) and be consistent over them.
* Value simple stock options like European, American and Asian
* An easily understood user interface.
* Be extensible to various types of products, like futures, swaptions and so on.

3.2 scope of subsequent release

In the subsequent release, new features will be added.

* With the help of the latest algorithms, for a given option type, the user is able to select one or more of several algorithms, such as binomial trees, simulation, or numerical integration, to calculate and display the result.
* Compare the result from different algorithms with each other.
* Programmers are able to “drop in” their own algorithm into the system.
* The program is able to display graphs of volatility smiles.

3.3 Limitations and exclusions

* The algorithms other than binomial trees, simulations and numerical integration.
* These three algorithms are the most accurate, stable, and efficient one. Adding other algorithms will slow the system down and may produce unsatisfactory result.
* The program cannot calculate the Underlying Price larger than 1000000.
* this level of price is rarely reached. This limitation will largely decrease the size of the program.
* The program cannot display more than 3 digits of decimals.
* this level of precise of little usage. This limitation will largely accelerate the calculation speed

4. Business context

4.1 stakeholder profiles

The target customers are big companies that need a more accurate, more efficient, and more flexible option prices calculator.

* Major value: improved calculation speed and accuracy, reduced rework, increased customer satisfaction
* The product is very promising and with the experienced programmers, its rate of accomplishing is very high. Thus, shareholders can be very positive about the product.
* Advanced algorithms which improve efficiency and accuracy.

4.2 project priorities

If emergency occurs, this project will be put in the top priority. All departments should shift to the project and concentrate on it.

4.3 operating environment

Windows, IOS, android