

Valuation report

- Project title: Project Redstone Rocket
- Project reference: RDSTN 1960
- Company Name: Toolip Valuation
- Contact: Yoyodyne Enterprises Corp.

Project Description: This project relates to Yoyodyne's rocket - W. von Braun.

Report date: 02/06/13

Introduction

This report contains the valuation results of the referred project according to the input data provided by the user. The first section of the report comprises the qualitative analysis of the answers to the questionnaires related to legal, technological, marketing, strategic and financial aspects of the patented technology. The second, third and fourth sections of the report contain quantitative results regarding the monetary valuation of your patented technology, based on the business and financial input data given by the user.

1. Qualitative data results:

The following results show the scores obtained in the legal, technological, marketing, strategic and financial sections of the questionnaires, according to the answers given by the user. The scores obtained are percentage values between 0% (worst) and 100% (best). Values below 30% are considered very weak and therefore it is suggested to improve them before investing in the patented technology. Weak values such as these are usually related to high investment risks. On the other hand, values above 70% are considered strong, and thus advisable for investment. These strong values are usually associated with high opportunity potential.

- Legal Status Score. 7

- Technological impact score: 66.67 %
 - Market projection score: 82.22 %
 - Financial viability score: 63.33 %
 - Strategy position score: 62.50 %

Patent qualitative results:

Based on the previous results, the below values show the overall patent score, the overall risk score and the overall opportunity score for your technology project. The scores are percentage values between 0% (worst for patent and opportunity scores, best for risk score) and 100% (best for patent and opportunity scores, worst for risk score). Values in red point to a weak score for each category, while orange and green values refer respectively to medium and strong score values, for which investing is advisable.

Total patent score:	70.00 %
Risk value:	41.67 %
Opportunity value:	73.33 %

The risk score measures the factors which can negatively affect your business by lowering the monetary value of your technology. These factors are associated, for example, with the uncertainty of obtaining full patent protection for the selected markets, or the need of further pre-production testing of the technology. The opportunity score measures the factors which can positively affect your business by raising the monetary value of your technology. These factors are associated, for example, with the possibility of extending your patent to further markets or obtaining a greater turnover by commercializing the patented technology.

Please also note that, even for the cases of high risk or low opportunity scores, the predicted monetary value of your patent technology can still be high. However, that value will be subject to higher uncertainties during the patent's life expectancy. In this sense, this fact will probably translate into lower transfer or license prices for your technology. It is strongly recommended to work on, if viable, all the questionnaire's answers marked with lower values in order to obtain the best possible business background for your technology.

Patent qualitative results:

The following bar chart shows a distribution of each of the qualitative scores, between 0% (worst value) and 100% (best value) obtained for the legal, technological, marketing, strategic and financial sections of the questionnaires. On the right side of the chart, the black bar shows the total patent score for your technology.



Figure 1: Patent qualitative scores.

Risk / Opportunity analysis:

The chart below shows a Risk / Opportunity score distribution of your patented technology, divided in four sectors according to the associated qualitative values obtained. Both risk and opportunity values are computed between 0% and 100%, where the better values are assigned to the top-right sector (low risk and high opportunity) and the worst values are assigned to the bottom-left sector (high risk and low opportunity). Investing and commercializing the patented technology is advisable for values in the preferred top-right sector. Regarding the volume of the score circle, this is proportional to the contribution of the patented technology to the company profits.



Figure 2: Risk / opportunity values.

2. Financial data results:

This section contains the information related to the quantitative financial results used as an input by Toolip Valuation to calculate the monetary value of your patented technology. The financial input data cover your business turnover, direct and indirect costs and provisions for depreciation, as well as the growth and discount rates that affect the final valuation results. Under the financial input data, the net present value (NPV) of your technology is shown, as computed for a 15-year investment period. The NPV is the main result of the valuation process. It represents the present monetary value of your patent, and it can be viewed as the maximum price acceptable at the time of evaluation if the patented technology was to be sold, if the risk of investment was zero. The net present value is intended to set the top price for technology transfer or licensing purposes. It takes into consideration the contributions of every future cash flow associated with the business area of the patented technology and adds them up, discounting the effect of time in every cash flow.

- Business annual turnover:	-	1,600,000.00 EUR
- Direct annual costs:	-	750,000.00 EUR
- Indirect annual costs:	-	150,000.00 EUR
- Total investments / depreciation:	-	500,000.00 EUR
- Investment / depreciation period:	-	3 years
- Discount interest rate:	-	5.00 %
- Share of current company turnover:	-	80.00 %
- Total growth in company market:	-	6.00 %

Net present value (NPV):

6,523,471.00 EUR

Net present value vs. Discount factor:

The chart below shows the net present value as a function of the discount interest rate factor (in %) applied for reducing your cash flows. As can be seen in the chart, the selected discount factor strongly affects the final NPV. In this context, the choice of discount rate should be made carefully for determining the value of your technology.



Liquidity forecast:

The following chart shows the projected liquidity, i.e. the future calculated cash flows (represented in a dark blue plot) associated with your patented technology for the remaining 15 years. Each cash flow can be negative (this can be the case for the pre-commercialization period, or for the first year of every depreciation period) or positive (this is usually the case for the life expectancy period in the market of the patented technology). The light blue plot represents the accumulated liquidity for the remaining 15 years.



Business area profits:

The following chart shows the total profits (represented by a black-dot plot) obtained in the specific business area for the following 15 years. The chart also shows the contribution to those profits obtained by the use of the patented technology (dark blue bars) and the contribution to those profits obtained without using the patented technology (light blue bars). Thus the patent profit chart is a projection of the patented technology's effect on the company accounts, and this is compared with an estimated account without the implementation of the patented technology.



Company profits:

The following chart comprises columns made up by three bar-elements depicting the whole business result's forecast. The darkest blue bar of each column shows the company's profits in the business areas which are unrelated to the patented technology's business area. The mid-blue bar of each column shows the profits achievable in the evaluated business area without implementing the patented technology. Lastly, the light blue bar of each column shows the patented technology's foreseeable profit, i.e. the patented technology's contribution to the business area profits and hence to total company profits. The diagram is a depiction of the patented technology's strength/weight within the company's financial structure.





3. Risk / opportunity-modified net present value:

The following result shows the net present value (NPV) modified by the effect of risk and opportunity factors, as determined by the answers of the questionnaire. The modification of the NPV result by the risk and opportunity associated with your project constitutes a more realistic value of the patented technology for transfer and license purposes. Below the risk/opportunity-modified NPV, a double plot of the NPV as a function of a variable risk value is shown, represented with an opportunity value of 20% (dark blue plot) and 80% (light blue plot). As seen in the chart, a low risk value will raise the NPV, and a high risk value will decrease the NPV accordingly. In addition, a low opportunity value will decrease the NPV, and a high opportunity value will raise the NPV accordingly.



Figure 7: NPV results for variable risk values, evaluated with 20% and 80% opportunity.

4. Royalty rate forecast results:

This section contains information related to royalty rate calculation results for your patented technology. The results are intended for their use in license agreements, and they are based on the annual business turnover (as defined by the financial input data) and the computed mean liquidity during the life expectancy of your technology in the market (which is the mean annual cash flow forecast). Under these two results, the square contains the forecast for annual royalty payment. The result is also expressed as the percentage of the annual business turnover and as the percentage of the mean annual liquidity. The results obtained are suggested as the reference values for setting a royalty rate pricing for licensing your technology in the selected market.

- Business annual turnover:
 - 1,600,000.00 EUR 885,460.06 EUR

- Average annual liquidity:

Royalty annual rate forecast: 208,113.50 EUR / year

13.01 % of the business annual turnover 23.50 % of the mean annual liquidity

5. Conclusions:

This report comprises the valuation results associated with the patented technology as computed from the qualitative and quantitative input data provided by the user. The results obtained by the use of Toolip Valuation are suggested as reference values for setting up a common background for transfer and license purposes, in order to define a fair and accurate pricing of the patented technology. However, Toolip Valuation disclaims any liability for the accuracy of the results obtained by the user through the use of this application. Although the computed results of the patented technology are based on mathematical models designed to provide a realistic valuation process, the final market values of the valuated technologies or patents may be above or below those calculated by the application. The user is strongly advised to be aware that the final market value may be influenced by further legal, technological, commercial, strategic or financial factors, that are not covered by the mathematical model employed by Toolip Valuation, as well as other factors that can lie beyond the control of the Toolip Valuation or the user.

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