

#### **Strategic Space Development**

# **Business Development** Secrets to Success

## **Estimating win probability**

## Special points of interest:

- Learn new techniques to estimate win probability
- Understand how win probability is fundamental to core processes within your business or institution
- Learn the three signs of impending business collapse and how business development efforts are fundamental to avoiding these conditions.

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ment courses in Las Vegas It is a well known fact that most win probability estimates are optimistic. Estimating the probability of winning new business is not an easy task. There are many variables and factors involved in winning new business and it is often difficult to discern your own relative strengths and the importance of the different factors. The resulting approach for many people, especially in the aerospace industry, is to offer up sophisticated guesswork. Educated guesses are often based on hard won experience and based in reality. However, the real danger in relying on guesswork is the underlying influence of optimistic or wishful thinking. Optimism is a common trait of successful sales and business development professionals. It is important to know when and where optimism is most appropriate.

Estimating win probability does not lend itself to traditional analytical techniques. There are many varied and obscure factors and many of the primary factors cannot be precisely determined. Experience with our clients and on over 600 proposals has yielded a semi empirical approach that can yield surprisingly accurate results. The key to this approach is to break down the complex question of win probability into smaller and more manageable elements. In this approach, primary elements that contribute to a win probability are individually estimated and then combined.

Win probability estimates are needed to support a variety of enterprise wide activities and one of the most common uses is in support of bid decisions. Managers often use this win probability estimate to justify a bid decision and the corresponding investments. Similarly, a low win probability often justifies a "no-bid" decision. Given the high stakes associated with a bid decision, getting a good estimation is worth the extra effort to improve its accuracy.

Another significant use of win probability estimates is for revenue estimation once proposals have been submitted. A computed win probability is multiplied by the proposed revenue amount and added in time distributed fashion to estimate a probabilistic revenue stream. Alternatively, another technique is used if there is a statistically significant number of proposals and statistical experience



Proper determination of win probability allows for more informed bid decisions as well as better estimates of future revenue trends.

with prior win/loss rates. In this case, proposals are binned into probabilistic categories such as 0-20 percent, 20-40 percent and so forth. This then generates a set of revenue curves based on probability by summing the most probable bin category first for the most probable revenues and summing successive probability ranges to estimate new probabilistic revenue curves. In the case where an organization has a large experience base with proposals, sometimes statistics have been kept and can be used to predict bulk win probabilities and thus accurately support forecasting. However, for smaller organizations, large proposals, and complex procurements, individual estimations will prove to be more useful. Very large proposed revenues weighted by "average win rates" can sway revenue estimates unrealistically high.



Win probability estimation is more often than not based on simple guesswork. While highly accurate predictions are difficult to impossible, some analytical techniques improve the accuracy of initial estimates.

"The knock down factors are empirically determined but are often available from an initial competitive estimate."



Win probability serves valuable and important functions across the enterprise.

## **Estimating Win Probability continued**

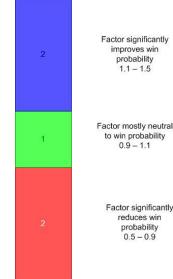
The major factors affecting win probability are generally accepted to be as follows.

- The number of submissions expected for a given opportunity. Simply put, the more proposals that are being evaluated, the less your numerical probability in winning.
- The number of awards per award. The higher the number of awards, the higher the uncorrected probability of an award.
- 3. The proposing organization's domain expertise in the key areas that dominate the evaluation criteria
- 4. Familiarity of customer with proposing organization
- Familiarity of customer with proposed concept and approach
- 6. Proposal conformance to customer requirements and desires
- 7. Understanding of customer needs and desires
- 8. Proposal pricing factors relative to competition
- 9. Existence or lack of discriminators
- 10. Past performance with customer
- 11. The likelihood that the opportunity will be funded.

The base probability estimate is figured by dividing the number of awards by the number of competitors as follows:

 $Pwin = \frac{Nawards}{Ncompetito\ rs}$ 

The additional factors can be translated into numerical values that can be used to either increase or decrease the base probability assessment. These fac-



tors will vary between 0.5 and 1.5 and are multiplied against the base probability estimate to knock down the intrinsic win probability or to enhance it as follows:

Each parameter is estimated

$$Pwin = \frac{Nawards}{Ncompetitos} \bullet F1 \bullet F2.$$

independently and must be assessed realistically to arrive at a realistic estimate. The knock down factors are empirically determined but are often available from an initial competitive estimate. If the proposal is still being developed or simply being contemplated, you can estimate the P<sub>win</sub> by using only some of the major factors that are known thus leaving the other factors essentially as neutral. You might also have factors that are specific to the given procurement and are not presented here.

The net value of the approach is to estimate each factor independently thus introducing less individual bias through narrow considering of specific criteria. The result will be an estimate that is less encumbered by personal bias and wishful thinking and can be defended piece by piece.

Another use of this formulation is to game proposal efforts or to calculate a range of win probabilities for a range of technical options or teaming possibilities for a given procurement. By evaluating various approaches with this approximation, strengths and weaknesses can be assessed and strategies developed guided by these analyses.

In any case, the estimate is only as good as the knowledge of how many competitors there are and the realism of the knock down factors. The power of this method is that it results in a series of evaluations simpler and smaller in nature that can be evaluated in a more straightforward manner. Combining these simpler elements together accounts for the overall complexity of the win probability estimate.

### Is your business failing? Three early signs of impending failure

The statistics are grim. The vast majority of new businesses fail within two years of start up. According to the Small Business Administration, 7 out of 8 businesses eventually go out of business and most of them self terminate within two years.

Failure is not limited to small businesses. Think of how many large airlines that have disappeared including Pan Am airways. Pan Am went out of business by consistently selling seats at a price below the cost of servicing those passenger miles. The same is also true of once dominant automobile manufacturers such as Packard. By the time of Packard's demise, each car sold lost the company an estimated \$2000.

These statistics beg the question as to why so many businesses fail. A large volume of literature and hot air has been devoted to explaining this phenomenon. It is our experience that cash flow, or cash trickle as the case may be, is at the heart of most business failures. Continued cash flow problems will eventually impose on creditors and suppliers who need to be paid to continue servicing your business. Once a business reaches the point that debts, suppliers and even payroll cannot be serviced, collapse is imminent. While cash flow issues can be short term and can be handled with debt, systemic cash flow problems are almost always fatal to a business.

Long term and fatal cash flow problems that ultimately lead to business collapse are preceded by three observable indicators:

- 1. Decreasing gross margins
- 2. Increased wages as a percentage of gross sales
- 3. Increased sales volume.

Decreasing gross margins lead to fewer profits. Generally when managers encounter this situation alone, external conditions are blamed. Often, little is done to compensate for the reduced profit margins through staff changes or reductions under the rationale that it is a temporary condition.

Increases in the ratio of labor costs as a fraction of gross sales indicate that the cost of sales is increasing thus leaving lower contribution margins and less profit. This can be a result of a prolonged slump in sales or a bloated management or staff structure. Alternatively, these financial results could be the result of sales and business development efforts that are generating less profit. Under these circumstances, managers often misdiagnose the cause and effect and decide that increased sales volume can help flagging financial performance. The operating phrase here is to "make it up on volume".

If the sales and business development efforts are focusing on price and not value, it is likely that sales are being made at a price that results in a low or even



negative profit margin. Experience has proven that additional emphasis on increasing sales volume further depresses profit as the sale force focuses on the volume and not pricing for profit.

Increased sales volume masks the underlying problem of profit-Experience with our ability. clients has shown that sales and business development efforts are key to maintaining high profit margins. Proper management techniques of the sales and BD efforts, a firm understanding of the real cost of doing business, and sales emphasis on profitability are the starting point for increasing the overall business profitability.

Next month, we will cover ways to manage BD forces to emphasize profitability in sales efforts. The success of failure of your business could depend on it. The single largest reason for business failure is poor management of financial activities combined with lack of management competence and experience.

> "Long term and fatal cash flow problems are preceded by three observable occurrences: decreasing gross margins, increased wages as percentages of gross sales, and increased sales volume."



Sales that generate high profit are fundamental to the success of the small business enterprise. Business development managers must be on the alert for sales practices that undercut price in favor of volume. Strategic Space Development Inc. 4308 N 1200 E PO Box 459 Hyde Park, Utah 84318

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Strategic Space Development is a business development consulting firm specializing in aerospace and defense sector business and competitive intelligence. Strategic Space has a many top drawer clients in the high tech and aerospace sectors and works with companies to grow revenues, identify and pursue new business opportunities, and make sound strategic decisions. Our efforts focus on working the client factors that increase the probability of winning new business. SSD's staff hails from DoD and civil space backgrounds and has a breadth of business and engineering experience to work across the large domain of technical sales and strategy considerations. SSD also offers professional development courses in business development, competitive intelligence, strategy development, and engineering disciplines.

#### Strategic Space Development ..... Delivering Increased Win Probability www.strategicspace.net and www.bdcourses.com

## **Business development courses offered in Las Vegas**

Join us in Las Vegas May 17, 18 and 19 for a business development seminar. This course is an ideal way to hone your business development skills and to get and overview of the business development process as it applies to the aerospace and high technology industry.

This course is meant for both experienced business development professionals and those new to the profession and focuses on:

- Understanding the sales process
- Developing the new business funnel

- The role of marketing and brand generation
- Developing Competitive Intelligence
- Proposal strategy development and execution

The cost of the course is \$1,500 for early registrants (one month before seminar) and \$1,800 for normal registration. Group and client discounts are available. Space is limited so be sure to make your reservations early. Contact Adrienne Smith at 435-232-7768 or adrienne@strategicspace.net to reserve a spot. More information can be found at our website www.bdcourses.com. We hope to see you there. Additional courses and dates are also offered on our site.

We also offer courses on site at your place of business. The advantages of an on site course are lowered course costs, eliminated travel time and costs and wider exposure within your company. Call us today for details.



This course will emphasize an overall understanding of business development processes and techniques fundamental to your success.