One of the most critical challenges that you face as a senior executive of a construction firm is establishing a strategic business plan to guide and direct the activities of your company through the uncertain and volatile construction marketplace.

Among the issues which you must consider are:

1. The changing conditions of the external marketplace; will it expand? contract? or remain stable in the foreseeable future?

2. Should you emphasize growth, expansion, or diversification?

3. Should you attempt to adjust your company’s market position? Your pricing strategies? Your cost control strategies? Your cash flow management policies?

4. Should you make changes in your resource management? Human resources? Technical resources? Physical resources? Or some combination of these?

However you choose to answer these questions, your commitment to develop a strategic business plan will have a profound impact upon the bottom line your company will generate.

As fundamental as this statement may be, there has been surprisingly little attention given to how construction executives can develop and use strategic business plans for their companies.

In order to fill this need, this article introduces a tried and true method for strategic business planning. We call it the CDS Model of Strategic Business Planning,® or the CDS Model for short.
For the past twenty years, the CDS Model has been installed in consulting assignments undertaken for hundreds of our clients in the construction industry. These clients have included small, medium and large real estate development firms, general contracting firms, heavy and highway construction firms, electrical contracting firms, mechanical contracting firms, as well as a host of various subspecialty firms providing services throughout the United States. These efforts have produced a remarkable three to fivefold increase in the bottom line performance for the firms who have installed the plan in their companies.

This article presents the results of the application of the CDS Model in these firms, as well as the practical issues which must be addressed to implement the Model successfully in your own company.

The Logic of the CDS Model of Strategic Business Planning®

The logic of the CDS Model becomes clear by looking at the progression of steps involved in putting together a strategic business plan for your company. These steps involve an understanding and familiarity with the four major variables of the CDS Model: 1) Overhead, 2) Volume, 3) Markup Rate, and 4) Pretax Net Income. In the Model, **Overhead** is the annual investment your company makes in its people, plant, and facilities. **Volume** is the annual revenue your company is capable of generating. **Markup Rate** measures the price your company bids relative to the direct costs it will incur as it does a job for a customer. **Pre-Tax Net Income** is the annual profit your company earns, after direct costs and overhead are expended to complete the work.

The relationships underlying this Model reflect the process by which a construction company learns how to survive, grow, and prosper in the competitive structure of the industry. It is a process you must learn to understand, manage, and control if you are to benefit from the risk/reward relationships you will face in the marketplace.

**Overhead: The Fundamental Planning Statistic**

The first step in using the CDS Model is to determine the level of risk you are willing to take to position your company to compete in the marketplace. For example, do you want to become a $750,000 a year specialty subcontractor engaged in drywall installation? Do you want to become a $10,000,000 mechanical contracting firm engaged in the installation of heating, ventilating and air conditioning systems? Do you want to become a $50,000,000 general contracting firm engaged in design/build construction projects?

**Your commitment to strategic planning will profoundly impact your bottom line.**

While many issues are involved in making these decisions, the only one you can know with any degree of certainty before your planning process begins is that you will incur a “cost of doing business.” As a going concern, this cost of doing business represents the annual Overhead Investment which you must make to position the resources of your company to service the marketplace at your projected level of competition.

In the CDS Model, there are three different types of overhead investments which you will be called upon to make: 1) Direct Job Overhead, 2) Indirect Overhead, and 3) Operating Overhead. **Direct job overhead** is the investment you must make in the tools and equipment necessary to support company activities at the level of the job in the field. These investments may include dump trucks, service vans, backhoes, compressors, welding units, etc.—a host of technical inputs which must be put in
place before one project is started in the field.

*Indirect overhead* is the investment you must make to purchase the services of the people who execute all of the middle management functions of sales, estimating, purchasing and project management on the one hand, and job costing, cash flow management, and financial feedback on the other. This investment includes the compensation paid to these individuals, as well as their associated fringe benefits and operating expenses such as taxes, insurance, automobile expenses, and their selling costs.

*Operating overhead* is the investment you must make in the space and outside facilities used to physically “house” your company and to provide the external support needed to maintain its
physical presence in the marketplace. This investment includes rent, heat, light, power, telephone as well as outside third party professional services such as legal, accounting and consulting.

Taken together, these three types of overhead investments can be conveniently understood in terms that you can use on a daily basis to manage and monitor your investment. They allow you to address such vital questions as:

- How much should I be willing to invest to support the field operations of my company? That is direct job overhead.
- How much should I be willing to spend to hire and support competent people as the middle management team of my company? That is indirect overhead.
- How much money should I be willing to spend to house and support the operation of my company? That is operating overhead.

Overhead/Volume Relationships

Once you have decided how much money you are willing to spend in these three areas of overhead investment, the next step in the planning process is to determine how much volume the investment is capable of producing in a given year.

While there are precise ways of deriving the volume level which can be generated from a given overhead investment, it can be said, in general, that the greater the investment in overhead, the greater the capacity of your company to generate volume, the second variable of the CDS Model. For example, if you are willing to invest $1,000,000 a year to support the operations of your company, you should have a greater capacity to generate volume than if you chose to invest only $500,000 a year.

This is not to suggest that the relationship between overhead and volume is constant. That is, each added dollar of overhead investment you make does not necessarily produce a corresponding dollar increase in the volume. If this were the case, planning for growth would surely be a simple task.

The reality is that you have one of two choices. You can position your company at a certain level of volume, and capitalize upon the economies of scale by developing a very efficient system to process work at that level of volume. Or, you can choose to change the scale of the operation of your company, by taking the incremental steps necessary to fund the capacity to move to a higher level of volume.

The decision you make will make will have a profound effect upon the profitability of your company, both in terms of the nature of the overhead investment you will be required to make, as well as the efficiency with which your company will be able to process its work for its customers.

The first step is determining the level of risk you are willing to take.

One way to illustrate the impact of the change in relationship between overhead and volume is by considering the typical evolution of a construction company as it moves through its different stages of growth.

Take the example of a ten year old specialty contracting firm that grows in volume from $750,000 after its first year, to $3,000,000 after its fourth year, and to $10,000,000 after its tenth year of operation. In order for the company to move from one level of volume to another, it has to make incremental investments in overhead including buying more equipment, hiring additional estimators and project managers and expanding its office operations. The overhead investment is necessary to “power” the growth of the company from one level of volume to another.

As the company grows, its volume will grow at a faster rate than its overhead. Thus, the proportion of overhead (as measured as a percentage of sales) required to produce the volume will actually fall. However, the
The ratio of overhead to volume will not fall to zero, unless the company chooses to go out of business.

Similarly, there is a limit on how much growth the company will achieve on any given dollar of overhead investment. Thus, as the company chooses to move to the next level of volume, it must be prepared to lose some of the efficiency of operation which is developed at one level of volume before it will achieve comparable efficiency at the new, higher level of volume. These limits set “equilibrium points” at which the company will operate at maximum efficiency, given its particular scale of operation. This illustrates the very fundamental point that the weight of the overhead becomes “lighter” as the company begins to benefit from the economies of scale and the efficiencies of its operation. This trend is shown in Figure 1.

Although the shape of the curve and the location of the equilibrium points differ for each type of construction company, they represent critical breakthroughs in the growth, development and evolution of the company. In each case, the transition from one point of equilibrium to another can and often does create a period of marked instability in the internal operations of the company. Thus, the company may find itself in a position where its overhead investment is too “heavy” relative to the volume which it is generating. Or, a company may find itself in a position where it has generated too much volume, relative to the overhead investment which the company may have made to turn the work over in an efficient and timely manner.

The ability of management to identify these equilibrium points and to make the appropriate adjustments in either direct, indirect or operating overhead is essential to create the appropriate balance which is necessary to sustain a profitable operation.

Failure to recognize and plan for changes from one equilibrium point to the next often explains why so many construction companies go out of business, and why so many others experience little growth. These companies have not provided for their overhead investments to match their capability to perform as they move from one scale of operation to another. On the other hand, companies which have made the appropriate adjustments in the management of their overhead investments can and do grow in quantum leaps, given the natural tendency to apply the knowledge gained from past experience to take on more technically complicated projects commanding a larger dollar value in the future.

Editor’s Note: Dr. Anthony F. Costonis is President of Corporate Development Services, Inc., Lynnfield, MA, a management consulting firm exclusively serving the construction industry. This article has been excerpted from Dr. Costonis’ soon-to-be published book, “Strategic Business Planning: An Overview.”