Understanding the reasons why construction businesses lose money is the best way to prevent unnecessary loss. The investigation and resolution of hundreds of construction company failures have generated a significant body of knowledge on the subject. The events and decisions that precede the failure of a construction business can be categorized and quantified in order to define the most common causes of these failures.

One of the most interesting phenomena revealed by this study is the fact that the events and decisions that cause or contribute to a construction business failure take place during the company's profitable years. To look for the causes within the difficult years when a company is losing money or breaking even is to study the result and not the cause. It is easy to be misled in a study of bad years because losing operations can generate unusual events and decisions even if the contractor is unaware of impending loss.

The events and decisions that precede a construction company failure generally take place during the one to three years prior to the first year the financial statements show break even or loss. A study of the events and decisions that caused hundreds of companies' difficulties identified five recurrent and industry wide elements of risk to potential profit or failure. The Common Elements of Business Failure are:

1. Increase in project size
2. Unfamiliarity with new geographic areas
3. Moving into new types of construction
4. Changes in key personnel
5. Lack of managerial maturity

Each of these will be briefly explored using very general examples of how these elements affect an organization and its ability to make a profit. For an in-depth presentation of each refer to the book: Managing the Profitable Construction Business, by Thomas C Schleifer, Ph.D.; published by Wiley, 2014. All of the decisions concerning these business activities are consciously made, and the events are clearly recognizable and usually appear to be routine business occurrences. Many contractors making a decision concerning growth or a decision to expand into unfamiliar locations or new types of construction do not see them as risky or dangerous and with proper planning and controls they don’t need to be. There is no suggestion here that a contractor should fear growth or other changes. What is expressed is that at least one and usually two or more of these events or decisions preceded the failure of a large number of contractors and that there is inherent danger in these elements. A complete understanding of the risks involved is necessary when encountering them. When two or more of these business changes are undertaken at the same time, they are often lethal.

**Increase in Project Size**
By far the most common element among contractors who fail is a dramatic increase in the size of projects undertaken. The change to larger projects usually occurs during profitable years and problems sometimes develop even before the first of the larger projects is completed.
Undertaking larger projects is a natural part of the growth of a construction company; the order of magnitude addressed here, however, is two times or greater the previous largest project.

The size of a project relative to the size of the company and to the size of its normal or average projects has a definite and direct relationship to profit potential. When a construction enterprise is operating at a profit doing a certain average-sized project and a certain top size, there is absolutely no reason to believe that it will profit if it takes dramatically larger work.

A construction firm may actually be able to build a project two or three times larger than it normally does, however the issue is, can they build it at a profit. If a company can construct $1-million road projects or buildings it may be able to get and construct a $2 or $3 million road project or building and get the job done. But the critical question is: Will it make a profit?

Making a profit on a job twice the size of a company's previously largest project would be at best unlikely. Making a profit from a job three times greater than the largest ever built is almost impossible without both additional resources, financing and a tremendous amount of careful planning all of which is unlikely without outside help. Getting additional resources might be possible, but how would a contractor with no background on projects of such magnitude determine what resources would be needed? Without previous experience, how could they carefully plan the work? Contractors who normally do top-sized jobs of $1, $10, or $100 million would be working in an altogether different environment than the one they are equipped for if they took on a $2-, $20-, or $200-million job.

Case study: Let’s consider an example. A contractor's previous largest project is $1 million and they usually have two or three additional jobs at any given time of $300,000 to $1 million and a number of smaller jobs in the under $300,000 range. The company’s annual volume is $3 million and they are generating a comfortable profit. When work dried up and backlog fell off dramatically, they went after larger and larger projects. They were able to capture a $3-million project and in their estimation their problems were over for a while. In fact their problems were just beginning. Let's look at the impact on their organization. Previously projects took about a year or less to complete. On the average one of their larger projects started about the time another finished and a third was at its midpoint. On the project near completion they were out considerable retainage, but the one in the middle stages was generating large monthly payments and the one starting up was producing good cash flow through front loading. By handling jobs in sizes they were accustomed to which normally were in varying stages, they not only had a reasonable cash flow but also had the time and resources available to look after all of their small jobs and keep them profitable.

Contrast this with the one $3-million job. At first the front load was terrific but the retainage mounted fast and within six or eight months became a higher amount than the company had ever had out on all jobs combined. By the end of the job the amount was strangling the business, and the project took longer to finalize than anything they had ever undertaken. While the project was similar to the work the organization had done, they were surprised at the level of inspection and supervision they were subjected to by the architect or engineer.
On larger projects municipality, state, and lender inspections generally have more red tape than smaller jobs for the same clients which may be more than management is used to or than field staff can effectively handle. Work rules are often more comprehensive on larger jobs and security and safety requirements broaden.

The larger project, although similar to other jobs the organization had performed, was not within its experience or financial capability to finance. The company got the job done, but making a profit was another story and with losses out-of-pocket combined with huge retention outstanding the company could not pay its bills. They are no longer in business.

**Unfamiliarity with New Geographic Areas**

A change from the geographic area in which a contractor normally works is almost as common an element preceding failure as the change in project size. A contractor's primary area maybe one county; half a state; three, five or 50 states. Primary area is that area in which the organization has normally operated, is comfortable with and has been profitable. While there are many good reasons for a company to expand into new geographic areas, such as normal growth, lack of work in primary area, and special opportunities, the risks must be recognized and planned for. Again, the question is not whether the organization can build a similar product in a different location. Rather it is whether a profit can be made at it?

An organization becomes very accustomed to working in an area and can easily assume that their type of work is done the same way everywhere. Yet the differences in customs, methods, procedures, regulations, work rules and labor conditions can be significantly different and expensive if not planned for. Examples are numerous: Merit shop contractor bidding outside their area without knowing in advance that the work would have to be performed union. In certain areas of the country it is common to install underground pipe practically underwater, while specifications in other areas require complete de-watering. In some states it is almost impossible to keep full crews during the first week of deer-hunting season. There are even some areas where local suppliers will give their best prices and service only to local contractors. Regulatory requirements and inspection may differ greatly from an inner city to the suburbs and may be completely reversed when county lines are crossed.

Without going into geological and weather conditions, there are enough potential differences to cause a prudent contractor to want to make certain they know what they are getting into when they take work outside their customary area. Local help, such as a joint-venture partner or new personnel, may be needed to facilitate the project. Compounding the problem, a contractor often takes a distant project that is also much larger than anything they have done in the past because it wouldn't pay to take projects of their normal size so far away which of course, magnifies the risk.

**Moving Into New Types of Construction**

For a variety of reasons, contractors sometimes change from one type of construction to another or add a new type of work to their existing specialty. Companies may change, for example, from highway work to sewage treatment plants; from heavy industrial to tunnel work; from low rise to high rise; or from office buildings to hospitals.
The need for research and planning before taking a new type of construction work is well recognized by contractors. What is very often underestimated is the entrance cost—the costs associated with the learning period during which an organization adjusts to performing a new type of construction work. Hiring a person who knows the new type of work inside and out may not be enough. Companies often complete one or more losing jobs before they can execute a new type of construction profitably. Unfortunately, some companies do not survive this change.

Most contractors are more specialized than they realize. Some construct several types of projects for instance but perform and profit better at one kind. They may call it luck but it's probably because they are better at pricing and constructing that type of project. Contracting organizations usually start out and remain with types of construction in which they have expertise, and their growth and success are based on the continued perfection of that expertise. Over time they become better able to estimate their kind of work and, therefore, become more competitive at getting it. They also become better at organizing and putting the work in place and become more profitable at doing it. Being able to plan and execute the construction of a bridge does not mean a person can profitably plan and execute a building.

A more subtle change in type of work is the change from public to private or from private to public sectors. This change, even when the project is a company's normal size and in their own area, has cost numerous firms a great deal of money. It certainly can be done with a healthy respect for the differences and risks involved and good planning, but the odds are worse if the firm has never done it before. Indeed many companies do both public and private work and have been doing so profitably for years. There is no suggestion here that it shouldn't be done, just a report that many contractors did not recognize the differences in advance and proceeded to price and produce the work for a loss. There are considerable differences between public and private work. Naming just a few:

- Qualifying for selection lists
- The criteria used for selecting the contractor
- The amount of collaboration between contractor, owner, and others
- The quality of work expected and delivered
- The amount of changes assumed to have been allowed for in the bid or expectations about change orders

Qualifying for bid lists works differently in the two sectors. In public work bidders may need to pre-qualify with the public body the state or other agencies, but these lists are often open to all contractors and in some cases any contractor can qualify with a little effort. A lot of start-up contractors achieve their growth within the public sector. Their size of project may be restricted at first by bonding requirements, but once they have pre-qualified they have a good source of work. This is one of the reasons public jobs usually have more bidders than private jobs.

Most private sector work on the other hand involve select lists that are more difficult to get on as owners or architects pick the preferred contractor, often in a less transparent manner. Few start-up contractors can find their way onto the better private-sector select lists where the number of proposers is usually fewer than on public projects of similar size. The number of perspective
Contractors on a project statistically affects the number of projects a company has to go after to get one. This, in turn, impacts the cost of doing business, which affects profit margin.

While some public bodies are required by regulation to award all work to the low bidder, private-sector selection is usually made with as much concern for quality as for price. This type of public awarding allows only limited control over the bid list or who gets the work. The parties are often strangers, and the award of projects and the administration of them are at arm’s length. A public project is usually administered "by the book." The contractor intends to perform according to the specifications and no more. The opposite is true of private work where the awarding party picks the proposers, may or may not open proposals publicly, and often ends up working with a known or at least pre-selected contractor. The owner, architect, and contractor are much more likely to collaborate on a private project.

Public work is sometimes bid at a lower go-in price than the same private work, and the number of change orders and extras may be greater on public jobs. The reasons are several. The lower price going in on public work allows little leeway to do minor changes at no charge, while on private work, with a team approach, minor changes in the work are often handled informally with no change orders.

On some hard bid public project, change orders may provide the only profit the job will make. Private work is often not priced as tightly because it is usually understood by all parties that a fair markup on the work is expected and numerous nuisance change orders are not. Contractors for private projects need to preserve their relationship with the architect, engineer, and owner for future work and usually build a reasonable fee and profit into the price, anticipating the necessity for minor changes or incidentals.

When an organization that does exclusively public work prices a private job low and goes after extras they often run into problems. The architect and owner on private projects may not be used to this approach and feel mistreated. The process creates an adversary situation that often leads to disputes and claims. The differences in expectations on public and private work may not even be known by the parties to the extent that avoidable disputes result. Even when the contractor, owner, and architect conduct themselves in a proper business-like manner, disputes continue. This may be part of the reason select lists, more common on private work, are being used on some public projects.

Changes in Key Personnel
There are three primary functional areas of a construction business, and each must be adequately managed and supervised in a successful contracting enterprise. The primary functional areas are:

- Estimating and sales (getting the work)
- Construction operations (doing the work)
- Administration and accounting (managing the business)

In every successful construction enterprise, a top-level manager is responsible for each of these areas or, in many cases, one person is responsible for all of them or two people share the responsibilities.
If a company is making a profit, it is primarily, if not solely, because of the efforts or these individuals. If one of them leaves, there is by definition no track record of profitability for the new organization as it was configured. This is a simple reality in business and even more so in the construction business that is so often a closely held small or medium-sized company.

Some will point to a business with six or eight good project managers and say, "that's why this company makes money." But someone may also point to the person who is primarily responsible for construction operations and say, "this company has those six or eight good project managers because of him or her." The same can be said about two or three key estimators, and some will say the same about the person primarily responsible for getting the work. Successful companies relegate responsibility for primary functional areas of their companies to key people.

The loss of a profit-making top manager puts a construction company at risk. The top management team of a construction enterprise is small compared to other industries because the labor side of the business is field managed and some contractors even subcontract all field work. The corporate organization is separate and distinct from the field organization. The quality of field management often relies primarily on the quality of the key person or persons responsible for construction operations. If a key person in charge of construction in an organization leaves, the company is permanently changed and at risk until his or her replacement proves that they can do the work for a profit. Operations provide the entire cash flow for the company.

On the estimating/sales side of a construction business, one or more key persons will be responsible for the firm's pricing strategy. This manager(s) will usually take a first-hand part in bid preparations and will determine the final price. The takeoff and estimating staff may be a great asset to the company, but the top manager(s) put them together, and are ultimately responsible for the success or failure of capturing the work. If one of these people leaves the company, the organization no longer has a proven team that can get the work.

The areas of administration and accounting are much overlooked and underrated by contractors. If there are two top men in the organization who are responsible for the three primary functional areas of the business, one of them will be stuck with the administration and accounting functions; usually these fall to the person responsible for getting the work because sales and estimating are more of an office function than construction operations are. In smaller organizations it is sometimes difficult to determine who is in charge of administration and accounting because this function is often not recognized as a primary area important to a company's success. It is often relegated to middle managers even in medium and large-size companies.

This problem is most acute in growing, medium-sized firms. When the business is small, the contractor runs the entire business, including such details as signing the checks. They are therefore close to the accounting side if only by virtue of paying the bills and having a continuous knowledge of the bank balance. If borrowing is required, they are the one who explains it to the banker. Administrative needs are few. The small contractor may or may not keep minutes of important meetings, confirm things in writing, or even reply to all correspondence received. The small contractor is in continuous communication with the relatively few players on their work in progress, and as a result, the impact on the business of
poor paperwork and administration is reduced. As the company grows and the staff increases, administrative and accounting duties are often relegated to middle managers.

If a principal in a construction firm is not responsible for this important primary function, the enterprise is improperly managed. If a dedicated, capable manager who takes personal responsibility for the administrative and accounting functions cannot be identified, the company has a serious problem and is not organized for success. It would be no different from an army marching into battle with no one in charge of its supply line. It's a machine with pieces missing.

If the person ultimately responsible for the company's administration and accounting functions during profitable years is lost to the organization, it is at risk. The accounting staff, under new management, has no track record for monitoring the company's progress and developing accurate and meaningful financial information.

In summary, one cause of company failure is inadequate replacement of the person or persons responsible for one of the three primary functional areas of the construction enterprise. Typically the changes in key personnel that contributes to or causes problems take place while the business is profitable.

**Lack of Managerial Maturity**

This element of Contractor failure is widespread of all in that it is very often found in conjunction with one or more of the other elements and may actually be a contributing cause of all the other elements. Many construction organizations were founded by one person. The entrepreneurs who survive the high mortality rate for start-ups usually enter a growth stage. The qualities and abilities required for a contractor to succeed at a small construction business are not necessarily the same as those required for the success of a larger construction business. Confidence and independence, the very traits that cause entrepreneur to want to be in their own business to begin with can mask the risks of growth.

Many entrepreneurs assume, "If I succeeded at this volume, I'll do twice or three times as well at two or three times this volume." At some point in the growth of every enterprise, however, the organization must change; it must become more sophisticated. At these junctures more authority must be delegated, more complex systems and procedures will be required, and more sophisticated people may be needed to handle them. Most entrepreneur, founders seem to instinctively follow a command and control strategy, however, as an organization expands delegation is required and some command and control must be given up. Some founders have great difficulty with that. It would be easier if these changes evolved slowly over a growth period because they would be easier for the contractor to digest. But this is not usually how it works because you can't hire half of a person or put in half of a new system in place so these changes come is hard to absorb portions.

Knowing when and how to make organizational changes is an aspect of running the business that tests the true skills of the contractor in a growing firm. Organizational changes necessitated by growth need to be made during successful times to assure continued success. The key to success in management is not to eliminate all problems, but to focus on the problems of the present stage.
of the organization’s lifecycle so it can grow and mature to deal with the problems of the next stage.

The contractor who resists change until he has proof of the need for change by having a losing year may have waited too long and some of the organizational changes that may be required to expand are difficult to recognize and hard for some contractors to accept even. Delegating responsibility and authority, hiring outside top managers who may have to supervise long-time associates, friends, or family members, and sharing financial information with more people are a few of the difficult options a growing company faces. Even harder may be accepting concepts like open book management where each employee learns to understand the company’s financial information, along with all other numbers that are critical to tracking the business’s performance.

The term "Managerial Maturity" is used here to mean that a contractor's managerial abilities must mature as the business does. They must change from doing everything themselves to building an organization that can do everything as well, or even better, than they did. Contractors who are unable or unwilling to change their organizations to deal with their growth should either curtail their growth and level off or face the risk of the business outgrowing its own organization. Attempting to do $100 million worth of business with a $20-million organization is suicidal.

Other Industry Concerns
These are a number of miscellaneous areas of concern for construction organizations. Each of these has caused performance deterioration or worse for a number of companies and any of them un-addressed can induce financial distress. If an organization is suffering from any of the primary elements of contractor failure addressed earlier, these miscellaneous areas of concern amplify the problem. The categories are presented in no particular order, however the degree to which an organization experiences the concern influences the impact on the company. Some of these issues may appear minor if an organization is not suffering from them, however, any one of them can impair a company if they get out of hand. Some difficult to discern and can exist for many years unrecognized. For that reason these bear careful reading periodically by those responsible for the success and wellbeing of a construction organization.

Growth and Risk
In the volume-driven industry of construction that thrives on growth there are failures even among the older and well established firms. The words "growth" and "growing" recur in the study of the management of risk in the construction business because the business risks in construction are simply greater during growth phases. A construction company must be managed well to be successful, and in the best of times there is risk. A rapidly expanding construction company magnifies its risks even if it is closely and intensely managed. There is nothing wrong with building a bigger business. That is the American dream. But the increase in risk in the construction industry from growth alone cannot be understated and should not be overlooked.

Market Driven
The ideal construction company would be organized to be market driven and not volume driven. It would strive for carefully planned growth but be prepared to level off or cut back on volume if the marketplace tightens or shrinks. It would use its markup flexibly as a competitive tool but never take break-even work just to maintain volume. In a tightening marker (greater competition
for the same work) or in a shrinking marker (less work available) the ideal construction company would price more competitively than it would in a better market and at the same time concentrate on making more profit on less work. It would have some “flexible overhead” built into the organization that could be cut immediately and would not hesitate to cut permanent overhead when necessary. (For more detail see Flexible Overhead elsewhere in this manual)

The ideal construction company is willing to get smaller to survive when necessary. The down cycle will pass and they will be ready for the upswing, but only if they come through intact. The large failure rate in the this industry is driven in part by construction enterprises pushing full speed ahead during weak or down markets with desperation pricing in an attempt to capture work that their competition needs as badly as they do.

**Controlling the Need for Volume**

Overhead costs are difficult enough for a contractor to control when the company is not growing, but in a growing organization they pose two dangers. Because an organization cannot add a half-person or a half-piece of equipment, they are forced to put on overhead costs during growth in larger amounts than perhaps they would like. This can cause losses until the company grows into the overhead. Herein lies the double problem: Reducing profits or losing money for a length of time because of sudden increase in overhead to accommodate growth is dangerous, and needing additional volume as an absolute necessity to cover the increased overhead puts the company in double jeopardy.

As an organization attempts to increase market share price will suffer as it is always necessary to make at least temporary price concessions to take the market share away from competitors unless there is an exceptional boom market. Boom markets attract the attention of out-of-area companies who when they move in also make price concessions to take the work away from local contractors to get a foothold. While construction companies may not make a conscious decision to lower their price, when they must have the added volume or new work that is exactly what occurs. And when price suffers it is usually for all our new work not just part of it, so the company ends up needing even more volume than originally planned because margins are suffering. This can easily lead to a downhill profit spiral during rapid growth and often does because as an organization gets stretched, there is little time for anyone to see the problem coming.

The additional growth then requires more overhead, creating temporary losses and the immediate need for even more volume. This spiral has caused numerous construction business failures. Rapid growth will also put a strain on the company's key people and systems, and sustained growth doesn't allow for a reasonable training period. Of even greater concern, continued growth doesn't give a contractor a chance to test new people or systems before the next new people are put on and systems added. If performance or profit starts to deteriorate during growth, it is always discovered after additional volume and people are taken on, and corrective measures are more difficult with everyone already stretched out. Overworked managers will be coping with the largest volume the company has ever handled and some companies don't recover from this scenario. Some contractors have pursued continuous growth with no measurement of performance right up to failure.
Rate of Growth
Measurement of the performance of a construction company is complicated by differences in sales from year to year and requires careful attention to the impact that volume fluctuations have on financial performance. If a company’s market is not growing, growth is obviously more difficult, but in a reasonable market construction companies are almost always growing at some rate. The author’s research indicates that growth for a construction enterprise at a rate of more than 15 percent in a year should be considered substantial. Sustained growth over more than a couple of years compounds quickly. At 15 percent a company doubles in five years and triples in seven; at 25 percent it doubles in three years and triple in five; and at 50 percent it doubles in 20 months and is five times larger in four years.

Growth requires more resources in the way of people, systems, and money and success is measured in an organization’s ability to find the necessary qualified people, have appropriate systems in place in advance of expansion, and finance the growth. Rate of growth obviously impacts the likelihood that an organization will be able to bring qualified resources to bear on the new work in a timely fashion. The alternative is to expect existing resources to do more, but few construction organizations are known for having underutilized resources or bench strength.

As volume increase, the expanded company is untested as an organizational unit. The only reasonable test is for the new organization to operate profitably and smoothly for a minimum of a year. Sustained growth creates a situation in which if the test proves unsatisfactory, new growth has already been added during the test year and the company is looking at second unsatisfactory year before they can roll back to their proven size and proven team. For many it is too late to retreat and recover.

Incremental growth instead of sustained growth may seem unnecessary even unnatural, but it is the best way to control the inherent risk in growth beyond 15%. With a series of: growth then test, then growth then test again; a company is able to reevaluate and recover after a failed test in lieu of constant growth until they encounter a bad year from which they may or may not be able to recover. This is simply prudent risk control. In sustained growth a company grows beyond its people and systems so often that they never really have the same organization long enough to truly test it, and are at constant risk with an ever changing team. In some cases it's just a matter of time.

Flexible Overhead
Flexible overhead is a new concept for the construction industry. The marketplace is so unpredictable and affected by so many variables that it is difficult to accurately forecast for even a few years. If an enterprise cannot be sure of a sustained growing market while allowing the businesses to grow, they can control risk by putting on overhead to deal with the growth that can easily be removed if the market turns down. With some of their overhead flexible the company does not become a slaves to their volume, and can fall back if necessary and concentrate on profit.

The method is to use temporary employee services for some clerical administrative and accounting functions. Use short-term rentals for some office and field equipment and short-term office leases, even temporary trailers, during growth stages until a new plateau of volume can be
reasonably assured. Even management people can be brought on with specific company growth and performance goals associated with their continued employment. This creates challenges for new people and refocuses the real risks associated with growth for existing management. The practices has been successful with established companies, start-up firms and is being embraced by a growing number of construction enterprises.

There may be costs associated with flexible overhead as lease and rentals may cost more than purchased equipment, temporary employees may cost more, and efficiency could suffer if not managed well. But the reduction and control of risk is well worth a modest additional expense. An added benefit is the motivation of existing management people who get involved and excited about this prudent, realistic and businesslike approach to growth. Existing managers can easily discern the positive impact flexible overhead has on their job security.

Flexible overhead may create cramped quarters and less creature comforts than privacy, plush offices, and the latest telephone systems, but those who use it to control risk during incremental growth phases say they sleep a lot better when they get home at night. Putting on permanent overhead in a fickle market is just too dangerous. Most who have tried the flexible overhead approach have been impressed with it to the degree that they put permanent overhead on even slower than would normally be considered safe. They are committed to keep some portion of their overhead flexible at all times as a hedge against a market slump and that portion seems to grow as they realize how easy and economical it is. The modest added cost is not unlike an insurance premium for protection from a known and measurable exposure. Companies that embrace flexible overhead manage their profit and not their volume.

Flexible overhead prepares a construction enterprise to do 25 percent less volume in any given and at the same time prepares it to do 25 percent more and have no permanent increase in overhead risk either way. An organization skilled in flexible overhead is able to gear resources up and down temporarily and more quickly and economically than an average construction company can secure permanent resources. I know this is a departure from the accepted norm, but it is clearly the profile of the successful contractor of the future.

**Peaks and Valleys**

There were always peaks and valleys in the construction marketplace and when things got bad in contractors’ normal work area they had to stick it out and do the best they could. Not that long ago contractors stayed in their own backyards. Construction companies generally worked a lot closer to home because their businesses, employees and equipment were not as mobile as they are today. Short-term rental or leasing wasn't as prevalent, and travel and relocation were more difficult. When the market was good, construction companies and all their competitors had a seller's market. Because contractors were not that mobile, they didn't go into new areas in great numbers and impact the market, so there was greater opportunity for substantial profits during good times.

The expression, "They took the good with the bad" is appropriate here. The good years allowed for great earnings, and in a more conservative era some of these extra earnings would be put away as reserves against lean years. Reserved or not, when a seller's market developed, contractors were able to generate substantially greater profits than they could under normal
market conditions which is not the case today because of increased competition resulting from greater mobility. Now when a good market develops anywhere in the country, out-of-area contractors compete for a portion of that market preventing a seller's market from developing and driving down prices. Very mobile nationwide contractors are able to follow good markets as do contractors from any area where there isn't enough work if they are willing to travel.

**Diminished Profits**
The net effect of greater construction industry mobility is that profit peaks are taken out of the various markets while profit valleys remain. The opportunity for really big years is substantially reduced, and the average profit in the industry has diminished over time and shows every sign of staying down. Ease of mobility nationwide and internationally will continue to maintain competitive pressures which in turn keeps prices down.

What this means to the average contractor is that without the prospect of the peak years that our grandfathers enjoyed, there is less opportunity to make up for bad year so they must control their valleys. With typically limited cash reserves contractors can ill-afford to increase risks without controls and must manage their businesses cautiously if not defensively. Limited profit margins require grow with prudence, testing as you go, and being prepared to withdraw from bad decisions.

**Employee Benefits and Compensation**
The subject of employee benefits and management perks fits well after the considering flexible overhead and peaks and valleys. The general and administrative costs of doing business are as necessary to the running of a construction company as are the costs of concrete and steel. Controlling these costs is imperative. The overhead cost of benefits and perks must be treated cautiously, and the best way to do that, particularly in good years, is to be prudent in preparation for bad years.

The discussion of bonuses is an intricate part of the management of overhead costs. Performance bonuses are common in the construction industry, however many firms mismanage them. Performance bonuses, to be effective, must be part of a carefully considered compensation plan, which is fully understood by all of the participants. Random, unorganized, and separate deal bonuses common in the construction industry cause more problems than they are worth. Some companies have even fallen into the trap of giving bonuses each year regardless of company performance. Bonuses tend to become regarded by employees as part of their wages and that they are entitled to them. Bonuses must be tied to the performance of the employee or of the company, preferably both.

Random or unorganized bonuses add overhead costs spontaneously and haphazardly, and the benefits from them diminish rapidly over time. To be effective, bonuses must be part of a formal, overall compensation plan. They must be tied to each individual employee's performance, the profitability of the entire job, and the success of the entire company.

The cost of bonuses or unrealistic compensation packages established during good years has accelerated the decline of many companies when lean years hit. Luxury automobiles, club memberships, and pleasure trips are near and dear to anyone's heart and commonplace perks for
hard-working managers in many construction enterprises. The biggest problem with these overhead expenses is that the costs to maintain them keeps going up while loyalty and motivation resulting from them goes down because they become expected and are taken for granted.

A company car is a valuable perk often it is given in lieu of a $2000 or $3000 raise in a particular year even though it's worth much more than that. The problem is that two or three years later they are taken for granted by the valued employee who now only understands one thing, that they are underpaid by $2000 or $3000 compared with somebody else. Giving such perks is hard to avoid because so many organizations are doing it, but there is more value in having the highest paid people around with no perks than the lowest paid people with great perks. A construction organization with high pay and few perks keeps their employees longer and has no trouble getting new ones to quit their lower paid jobs to come to work for the company because in most cases they have lost sight of the real value of their perks. It's cost-effective in the long run and more professional.

Another problem with perks is they are often selected by the contractor as something they value, already have or would like to have. Perks are usually given to employees without offering an alternative for different benefits or wages. Common courtesy demands gratitude so the giver has no real test of the level of appreciation or the value the employee places on the perk. For example; a conservative employee provided a company car which is replaced every two to four years may very well prefer to drive an older more economical vehicle and have the cost of the company car added to his or her salary.

The author’s research confirms that employee perks provided by well-meaning construction companies are universally undervalued by employees; who when they learn of the cost to the company almost unanimously state they would prefer to revive the value in compensation. Unfortunately it is difficult for a contractor to test this among their own personnel because employees do not wish to appear ungrateful. Research confirms that employees respond very differently to their employer than they do to anonymous blind research.

**Motivation and Loyalty**

Many closely-held construction companies, particularly smaller and mid-size organizations operate in a family or club-like atmosphere that many contractors believe it generates loyalty and longevity. There is no credible research to suggest differently, but the practice can be expensive and inefficient, and in the current working environment is becoming more difficult to maintain. People are changing jobs with greater frequency than ever before and job security and loyalty aren’t the top concerns of today's work force. Multiple jobs is more common than remaining 15 or 20 years with the same company as in the past.

Managers should look back over their company’s history and recall who the key players were five or seven years ago. For many this is an ever-changing scene and may be more so in the future. A close-knit group working in a club-like atmosphere may comfortable, but if the players are ever changing a portion of the cost of maintaining the family atmosphere might better be spent on training replacements and reserved for recruitment. Well managed construction enterprise is professional and business-like with a certain amount of internal competition among
managers. The contractor of the future will develop long-range plans around key positions, not key people.

**Internal Company Disputes**
The majority of construction firms are closely held or family businesses and internal disputes are not uncommon and can create discomfort and disruption. In a high-risk, low-margin industry where businesses are often operated at high levels of intensity and energy, some conflict can be expected. Personal problems can impact performance and profits significantly. Some contractors expect more from family members and are more tolerant of non-relatives. The best defense against conflict is open and honest communication of all parties at all levels within the organization. If continuing disharmony affects performance after management has attempted to resolve it, professional intervention is essential. Unresolved friction can fester and degenerate beyond repair and has caused untold personal anguish and distress. It can distort a successful organization and render an under-performing organization no worth saving. These issues can effect succession of leadership even after a great deal of planning has gone into it.

**Claims**
Years ago construction professionals understood their areas of authority and responsibility without the need for arbitrators or judges. This has been all but lost to the industry. Contract documents get bigger, claims seminars get larger, and an entirely new group of services is offered to our industry—construction attorneys, claims consultants, and dispute resolution specialists. In today's contracting environment, with all parties in the construction process trying to relieve themselves of any and all liability, construction professionals are left with too few clearly defined roles. Claims consciousness can result in defensive activities, paperwork, and the expending of energy to the extent that there is less time to devote to running the work and making a profit.

We need a truce in the construction industry in which owners, designers, and contractors agree to their specific responsibility and liabilities instead of trying to avoid or pass them along to others. It probably won’t happen, but if the party who makes the mistake fixes it, there is no dispute. There will still be a cost to fix the problem, but without the cost of arguing about it. Contractors must recognize the inherent risk of disputes and develop methods in advance to avoid them. The best approach is speed and compromise over expanding minor disputes and direct discussions with the parties affected in lieu of outside intervention which seems to assure the problem will escalate. The potential for disputes can increase with changes in project size and when working in unfamiliar areas or with unfamiliar owners and designers. Adding this exposure to the others discussed in this book suggests strongly that business expansion and growth be looked at carefully and planned prudently.

When disputes do arise, they should be responded to quickly and if the fault lies with your organization it is usually cheaper to fix the problem than fight. When not at fault, be certain the solution doesn't cost more than the problem. Try dealing directly and fairly with the parties involved before expanding the dispute. If forced to litigate or arbitrate, try to limit the dispute to the original issues and claim only real costs. The ridiculous but popular theory of throwing in everything but the kitchen sink clouds the issues, complicates the process, and increases the cost of resolution. The idea of doubling everything because "they'll only cut it in half anyway" has
backfired on a lot of people. What it tends to do is double the cost of resolution because it takes twice as long to weed out the excess and get back to the real numbers. Too often the exaggerated amount is cut in half supporting and perpetuating the original theory.

A more serious exposures in protracted disputes is that the process distracts important people from their work and negatively impacts morale. There is also the outside chance that an off-the-wall verdict could break the company.

Debt
Construction companies use credit in many ways: secured loans to purchase equipment; lines of credit to fund working capital as-needed or to fund growth and surety credit to secure payment and performance bonds to name a few. Arranging credit is not an event, it's a process and the management of credit requires skill and attention. Borrowing is a planned event. Unplanned or unscheduled borrowing is often a warning sign. It is too common for a company to borrow for working capital unexpectedly and not fully understand why the need arose. Management should be aggressive in determining why the money is needed today when there was no anticipation of the potential need last month. If an organization is borrowing working capital unexpectedly, it signals the need for better cash flow planning or that profitability is falling off. A construction business operating without cash flow planning is out of control for the simple reason they never know when you are going to run out of money.

A large line of credit is no substitute for cash flow planning. A company with no debt still needs cash flow planning, but for a company that borrows some or all of its working capital, cash flow planning is critical. Not only is there the possibility of running out of both cash and credit, there are interest costs to be considered. Cash flow planning must be included in all decision-making processes. Primary considerations in every business decisions are profit and cash flow and some managers believe that cash flow is more important than profit. The question for every business decision is, will this change or project create a cash outlay or influx and how soon and at what risk?

Credit and borrowing are important to the security of the business, intricate to controlling risk and should be controlled by top management through careful planning that takes into account the amounts and timing of cash needs and sources and timing of payback. Unplanned borrowing should be cause for great concern because either the cash flow plan is wrong, profit is falling off or there is a problem somewhere. In any case, new planning is required and the new planning on short notice should be undertaken with the same diligence as the original effort.

Business Planning
Formal long-range and strategic planning are not high on the agenda of many contractors. That's not to say contractors can't express their objectives and the plans they have to achieve those objectives, but many don’t have a written guide—a detailed long-term business plan. Without a detailed plan you are forced to react on the spot to whatever comes your way instead of setting direction, controlling the business and measuring progress.

Short-and long-range formal written plans are the tracks on which a company runs and make managing a construction business so much easier. Developing and following strategic and long-
range plans is a proven and effective tool for success. The time spent in the planning comes back to the organization with incredible interest and dividends of time saved.

Planning should be done at a time set aside for just that purpose and outside the mainstream of daily activity. The owners and key managers of the firm should discuss and evaluate their individual and corporate goals and see how they fit. Not everyone wants to go to the same place, perhaps not even in the same direction, but everyone needs to get on the same page. All the company's resources should be realistically evaluated and measured against short- and long-range goals to see if they fit. By establishing clear goals and directions that are understood by everyone concerned, meeting these objectives becomes easier if only because everyone is thinking along the same lines and looking in the same direction.

Things certainly don't always go as planned, but much of a contractor’s business future is actually within their control. When things change, plans can be reevaluated and altered so that the organization is not reacting, but acting in a structured fashion. The plan provides a measure of movement. The importance of formal written, short and long-range, detailed plans cannot be overstated. A construction company needs a one year hard, or detailed business plan plus two more years of soft, or flexible plans. A shorter plan may be sufficient for a smaller or newer company. Long term business planning is the ultimate risk control tool for and contractors who make the effort, find that they can manage with fewer surprises, more confidence and defined purpose.

**Recommendation**
Recommendation to construction professionals: Be careful, prudent, businesslike, and professional as you manage your business. Treat employees, associates, and other parties in the construction process as you would like to be treated and you will be able to manage with confidence and put some enjoyment back into building.