ACEMI

مدیریت کسب‌وکار در صنعت ساخت
(Construction Business Management)

ماژول ۱: سازمان‌دهی کسب‌وکار

بخش اول: ساختارسازی

ارائه دهنده:

سید محمدرضا علوی‌پور

(PhD, PMP, CMIT)

CMAA Authorized Trainer

دانشگاه Illinois Tech آمریکا

What we will learn?

- ☐ What has changed in the construction industry over the last four decades?
- ☐ The basic of construction business success
- ☐ The construction company life cycle
- ☐ Company organization
- ☐ Business planning

What Has Changed in the Construction Industry over the Last Four Decades?

Construction Firms Have to Win Three Times to Win Profitable Work

☐ The **traditional challenge** of contracting is not a small one.

1. First, contractors have to gain **experience**, pass a rigorous **licensing** requirement, and **start** their business.
2. Second, they have to **prequalify** with clients against the population of **competitors**.
3. Third, contractors must outdistance the **short list of their competitors**.

Construction Firms Have to Win Three Times to Win Profitable Work

- ❑ In other words, they **must win** the job.
- ❑ This demands that the contractor be able to **prove real value** to the client.
- ❑ From the start of the business to **acquiring profitable work** is a long journey.

Construction Firms Have to Win Three Times to Win Profitable Work

- ☐ Additional challenges that have arisen in recent years include the following:
  1. “Faster”-track schedules.
  2. Restrictions/red tape.
  3. Technology/computers.
  4. Competition.
  5. Work ethic.
  6. Design/build.
  7. Material availability.
  8. Environmental concerns.
  9. Political interference.
  10. Declining perception of construction as a career.
  11. Greater sophistication of the client.
  12. Contracting is more about business than craft.
  13. Lawyers are increasingly litigious and there are more of them.
  14. Designers are under the same cost and time pressures as contractors.
  15. Retention is released late.

The Basic of Construction Business Success

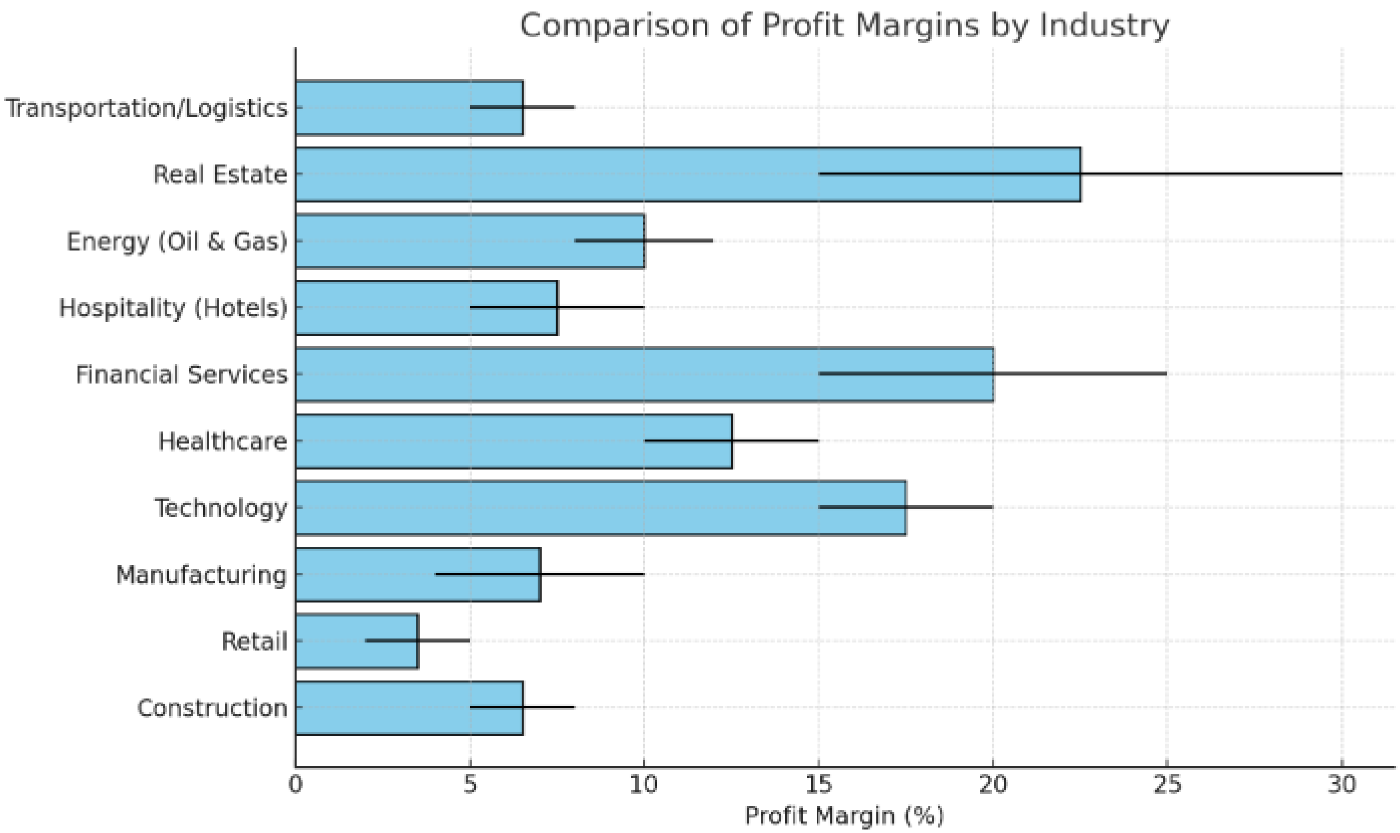
Introduction

- Lower margins increase risks,

allowing less room for error.

Why important in construction industry?

Introduction



Here is the plot comparing the profit margins across different industries, with ranges indicated by the error bars.

How to enhance profit?

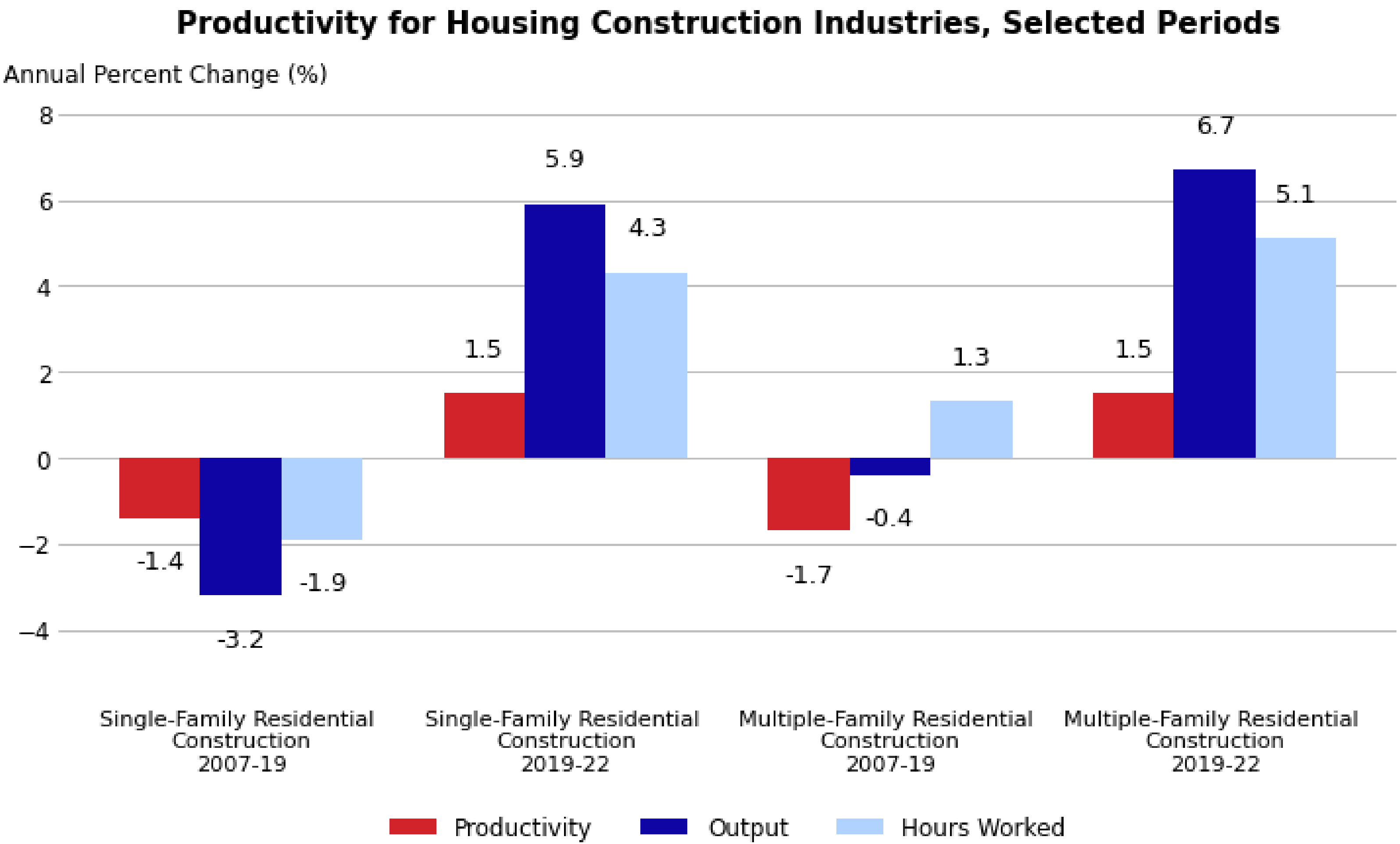
The basic of construction business success

- ❑ **Profit enhancement** in the future will depend primarily on
  - ❖ **Productivity** improvements and efficiency,
  - ❖ **Integration** in design and construction

Why this matters in construction industry?

The basic of construction business success

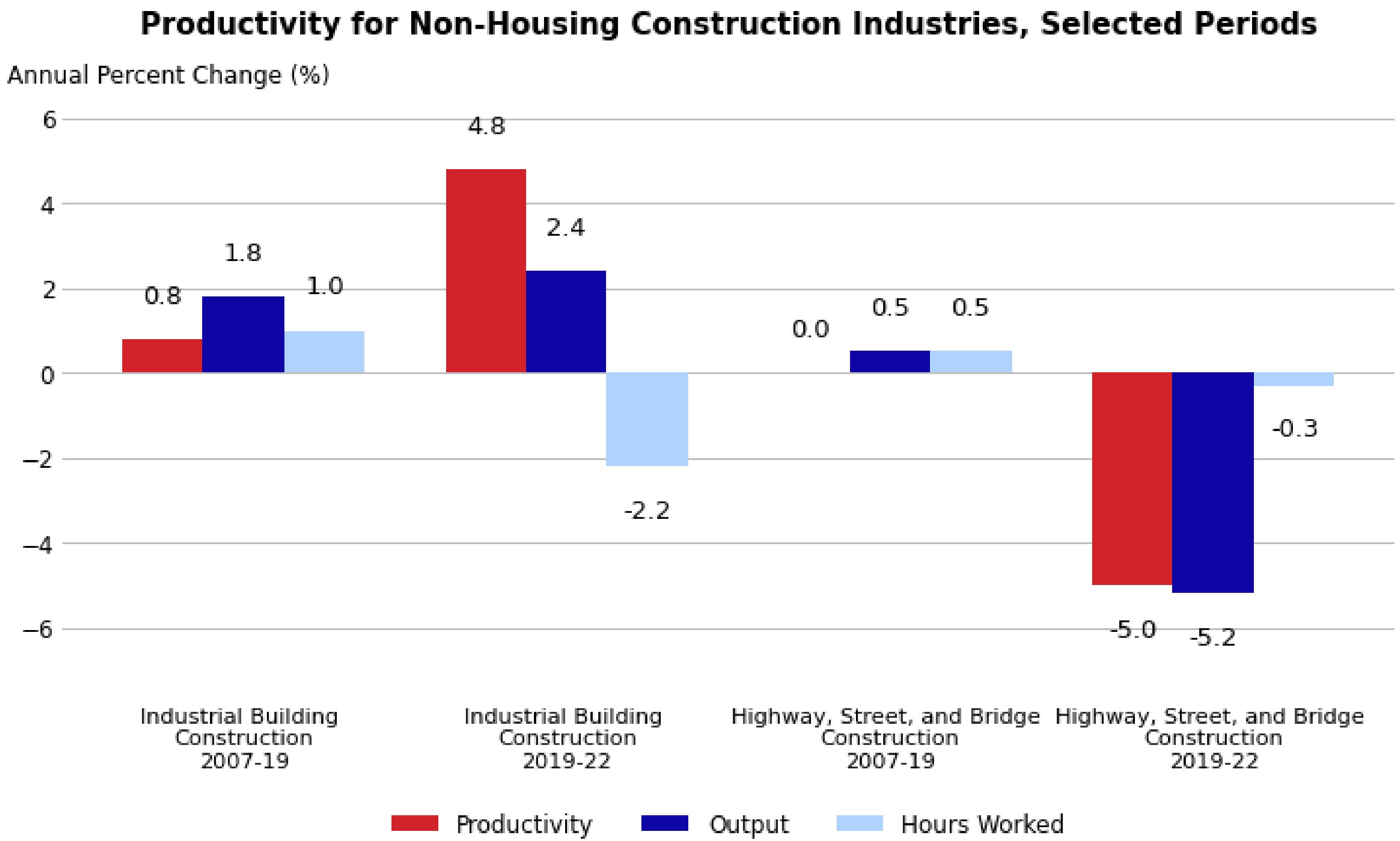
❑Construction productivity - USA



Source: U.S. Bureau of Labor Statistics

The basic of construction business success

❑Construction productivity - USA



Source: U.S. Bureau of Labor Statistics

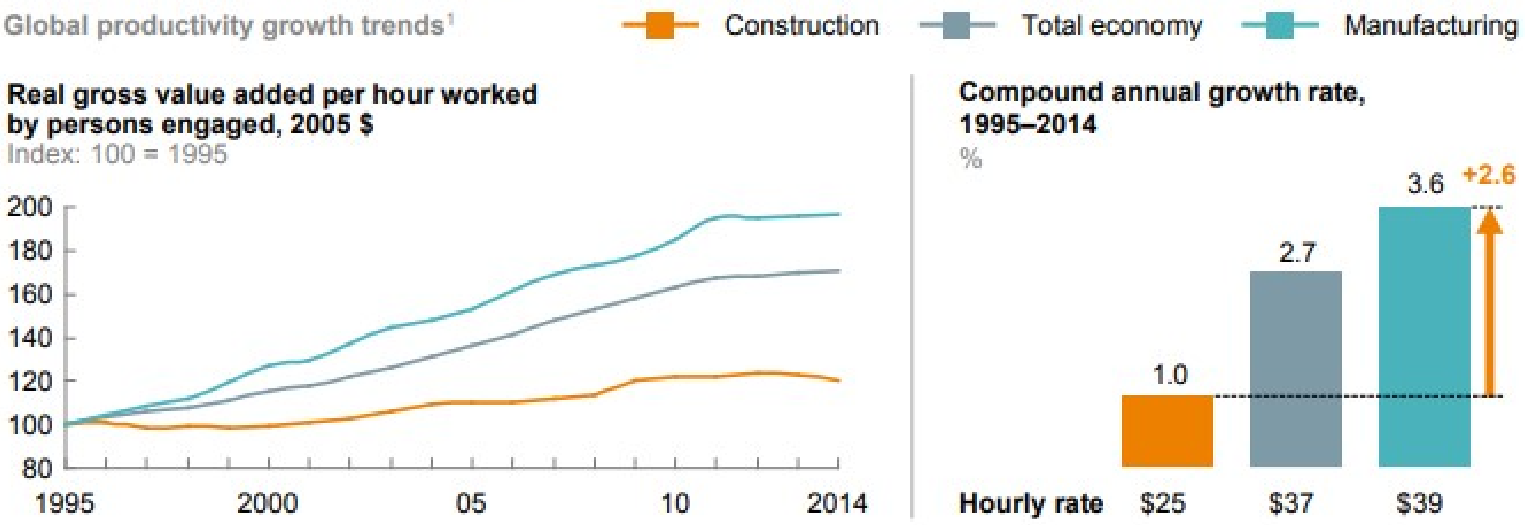
The basic of construction business success

❑Construction productivity - USA

Exhibit E1

Globally, labor-productivity growth lags behind that of manufacturing and the total economy

Global productivity growth trends[1]



1 Based on a sample of 41 countries that generate 96% of global GDP.

SOURCE: OECD; WIOD; GGCD-10, World Bank; BEA; BLS; national statistical agencies of Turkey, Malaysia, and Singapore; Rosstat; McKinsey Global Institute analysis

Most critical determinant of the success or failure of a construction business?

SOURCE: McKinsey Global Institute analysis

The basic of construction business success

- **Management decisions**

are arguably the **most critical determinant** of the success or failure of a construction business.

What are the primary reasons for contractor failure?

The basic of construction business success

❑**Many construction professionals** believe their company **loses money or fails** because of other reasons such as

- ❖Labor problems,
- ❖Weather conditions,
- ❖Inflation,
- ❖Interest rates,
- ❖Cost of equipment,
- ❖Tightening or shrinking of the market, or
- ❖Simply bad luck.

Is it true?

The basic of construction business success

❑**None of** these alone are **primary causes** of contractor failure.

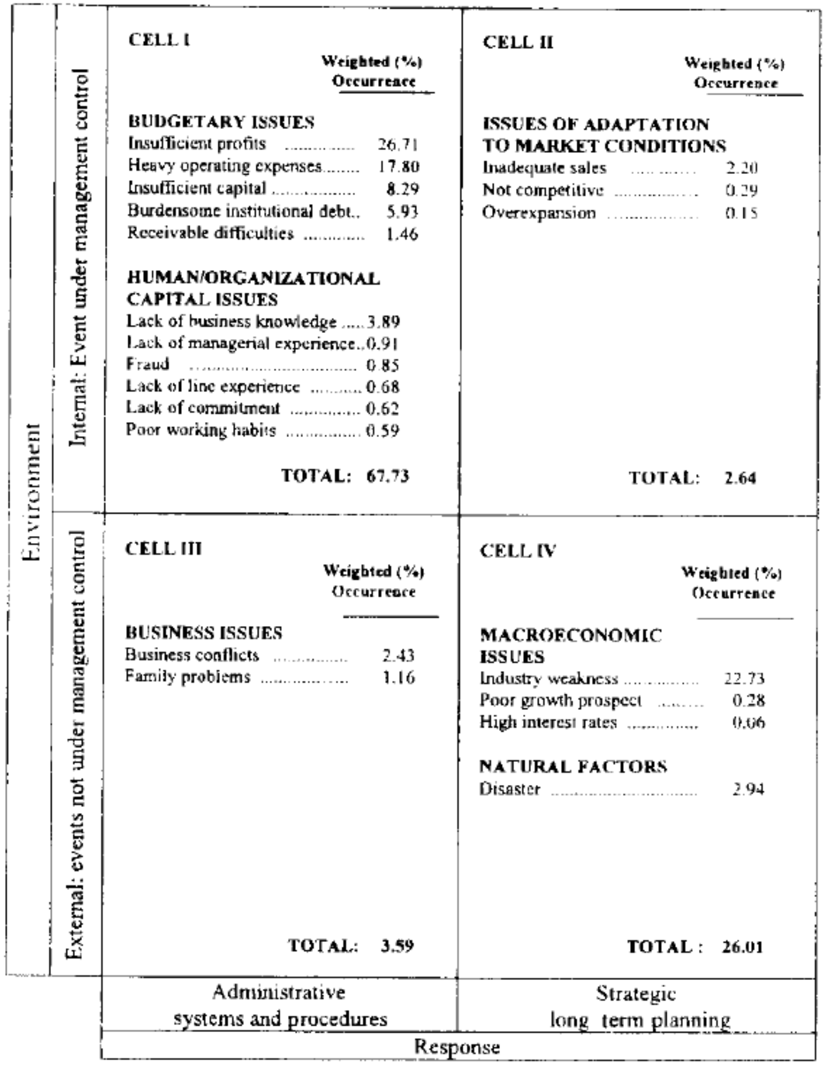
❑They **significantly contribute** to financial distress once a poor management decision is made,

but are **not the basic causes** of failure.

So is it because of the factors that are out of our control?

The basic of construction business success

❑Failure is **often not** a result of factors or conditions over which management has **no control**.



Environment		Administrative systems and procedures	Strategic long term planning
	Internal: Event under management control	CELL I Weighted (%) Occurrence **BUDGETARY ISSUES** Insufficient profits .... 26.71 Heavy operating expenses........ 17.80 Insufficient capital .... 8.29 Burdensome institutional debt.. 5.93 Receivable difficulties .... 1.46 **HUMAN/ORGANIZATIONAL CAPITAL ISSUES** Lack of business knowledge .....3.89 Lack of managerial experience..0.91 Fraud .... 0.85 Lack of line experience .... 0.68 Lack of commitment .... 0.62 Poor working habits .... 0.59 **TOTAL: 67.73**	CELL II Weighted (%) Occurrence **ISSUES OF ADAPTATION TO MARKET CONDITIONS** Inadequate sales .... 2.20 Not competitive .... 0.29 Overexpansion .... 0.15 **TOTAL: 2.64**
	External: events not under management control	CELL III Weighted (%) Occurrence **BUSINESS ISSUES** Business conflicts .... 2.43 Family problems .... 1.16 **TOTAL: 3.59**	CELL IV Weighted (%) Occurrence **MACROECONOMIC ISSUES** Industry weakness .... 22.73 Poor growth prospect .... 0.28 High interest rates .... 0.06 **NATURAL FACTORS** Disaster .... 2.94 **TOTAL : 26.01**
		Response	

Is it only when we are in trouble?

The basic of construction business success

❑**Growth** or simply **ongoing operations** involve <u>change</u>,

which has **risks** associated with it.

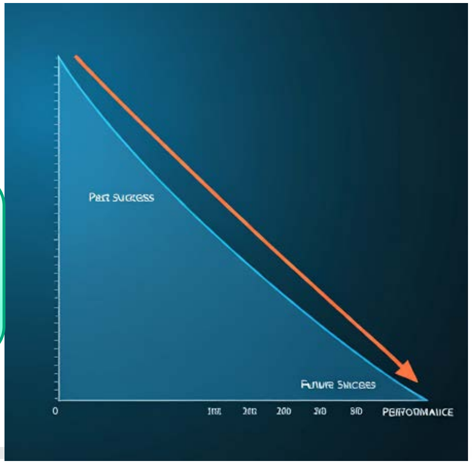
❖Therefore, **past success** is not an indicator of **future success**.

The events and decisions that precede the failure of a construction company generally

*take place **one year to three years***

***before the first financial statement** that shows a break-even year or a loss.*

Is change or growth always a good strategy when you are doing well in your operation?



Introduction

- ❑An enterprise may be doing **fairly well**, or even very well;
  however, the organizational stress of **growth or change**
  can cause weak components to **become fatal**.

***Change** itself must be **managed** to **control risk**.*

What are 3 primary functions of construction enterprise?

Three primary functions of construction enterprise

❑In other words, the key functions are

(1) Estimating and sales,

(2) Construction operations, and

(3) Administration including finance and accounting.

These three functions are separate and distinct but equal in importance.

The five primary elements of construction business failure

❑One of the most **interesting phenomena** 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.

So, let's see five primary elements of construction business failure!

The five primary elements of construction business failure

1 Significant increase in project size

2 Unfamiliarity with a new geographic area

3 Moving into a new type of construction

4 Changes in key personnel

5 Lack of managerial maturity

Will see them in later sections

Critical thinking and discussion questions

1. Explain why the rate of growth of a construction company impacts risk.

2. Explain why a construction enterprise should be market-driven, and not volume-driven?

The Construction Company Life Cycle

The construction company life cycle

- Construction companies go through **stages as they grow** from startup to maturity.
- An extensive study of closely held construction firms reveals that there are **five distinct stages of growth**:
  1. Startup,
  2. Survival,
  3. Success,
  4. Growth, and
  5. Maturity.

Figure 15.1 The five stages of growth.

- It is critical to understand **what stage a firm is in** because the elements needed for success in one stage can spell disaster in another.

The construction company life cycle

- ☐ A construction company generally **remains in the startup stage** for five to ten years and then

  moves into the survival stage or ceases to exist, as many startups do.

- ☐ The **business failure rate** during startup is extreme, with most studies stating that from **50% to 70% of startups fail**.

- ☐ If a startup survives,

  it moves to the **survival stage**, which in the best case can be **passed through in a few years,**

  while on the other extreme an **underperforming construction** company may **remain** in the **survival stage** **indefinitely**.

The construction company life cycle

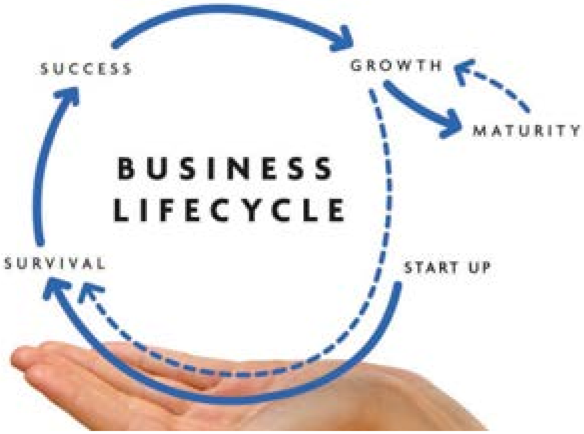
- ❑ The **failure rate in survival** is high

  but **less than in startup**.

- ❑ The **key to moving** on to the **success stage** is a significant reduction of debt.
  - ❖ Therefore, it is **not possible** to move from survival (where cash is scarce) directly to the **growth stage**.
    - ✓ The reason is that **growth** requires **funding**, and

      cash is earned and accumulated in the success stage,

      which precedes the growth stage.

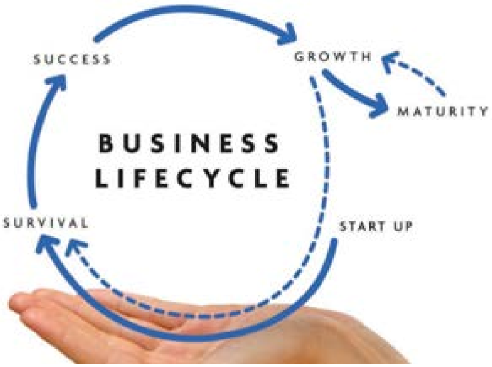


The construction company life cycle

- ☐ The success stage can be a launching pad for growth, or an organization can choose to remain in the success stage **indefinitely**.
  - ❖ **On rare occasions** a company can **pass** from its **success** stage to the **maturity** stage without entering the growth stage.
  - ❖ If a company **remains** in **success** for **many years**, it may **slowly grow** to a size where it has sophisticated systems and planning and becomes well-established in its marketplace that it **enters** the **maturity stage**.
    - ✓ It **may not go through the** growth stage if the company **never grows** at a rate **greater than 15% per year (plus inflation)** and **does not increase debt** during its **moderate growth rate**.
- ☐ A construction company **seldom reaches** the **maturity stage** before the **second** generation, and it usually takes **even longer** than that.

The construction company life cycle

- It should be understood that a company **cannot choose** or **decide what stage** it is **currently in**.
  - The stages are defined, and a company **fits into one** because of the **company’s current circumstances** and **conditions.**
    - A firm **claiming** to be in a stage does **not make it** so.
      - This is particularly **significant** when a firm in **growth** or **mature stages** has **financial problems** that move the firm **back to the survival stage** and it does not realize it or **refuses to acknowledge it**.



Stages of growth

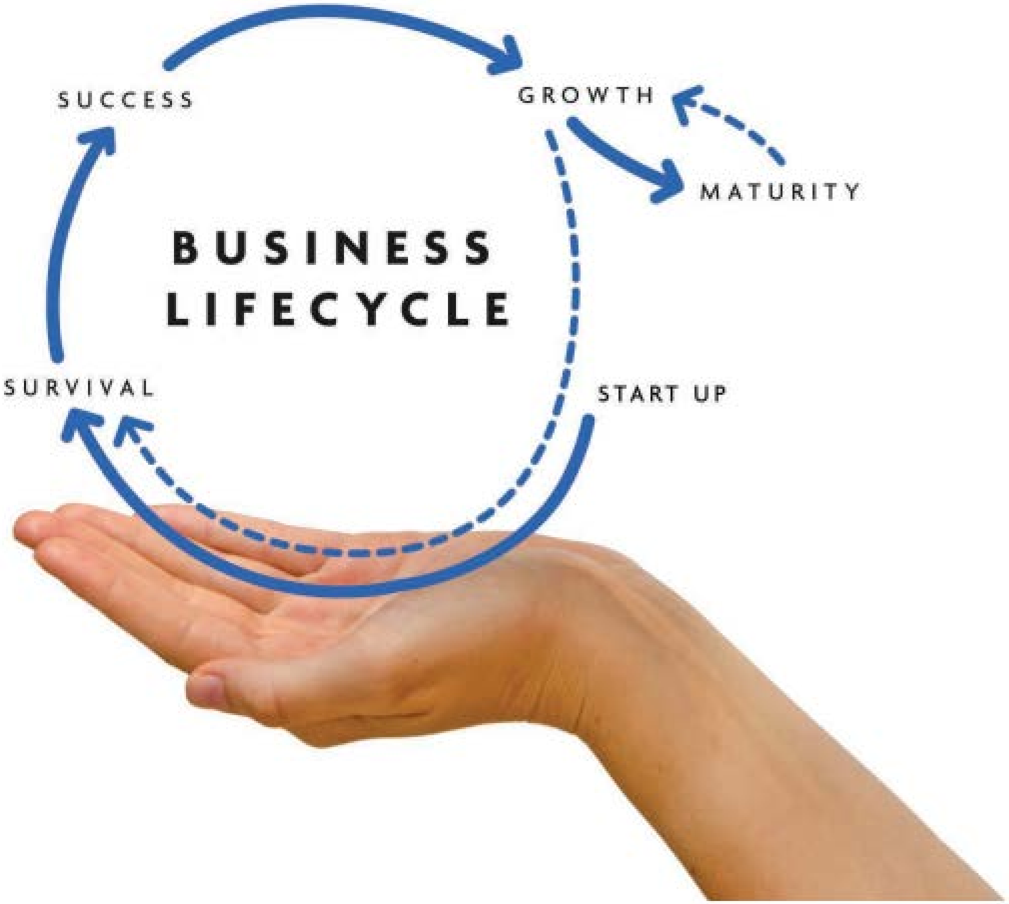


Figure 15.1 The five stages of growth.

Stages of growth – Startup

- ❑ A **startup construction** company is generally run by a contractor/entrepreneur **who does everything:**

  bids the work, sells the work, supervises employees, and provides working capital.

- ❑ The startup **lacks** any **assurance** that it will **survive the next fiscal year**.
  - ❖ This is **not to say** that it is in **trouble** or that it is **not making a profit**.
  - ❖ It simply has **no track record** yet.
  - ❖ It has **not proven its capability** to get and produce work at a **profit** on a **consistent** enough basis to satisfy its customers, **potential credit grantors**, or itself.

A company may stay in the **startup stage** for **ten years or more**, though some firms **progress more quickly**.

Stages of growth – Survival

- ☐ In the **survival stage**, the company is **stable**, and the **founder** and **credit grantors** believe that the enterprise is more or less permanent.
- ☐ The company has discovered its **preferred type of work** or found a **business niche**.
- ☐ It is still a **one-person show (or perhaps just a couple of key individuals)**, but the **primary concern** is **no longer** to get from one month to the next, because it has grown to a sufficient **size** to **generate enough revenue** to solidify the organization.
- ☐ The **contractor can borrow money** because the company is **relatively stable**, but usually **learns quickly that growth consumes cash** and that **more borrowing is necessary to grow.**
- ☐ There is **little** organizational structure or control processes.
- ☐ **Managers** follow the **very specific instructions** of the **founder**.

Stages of growth – Success

- ❑ A company in the **success stage** generates **positive cash flow** from its operations.
- ❑ If the company owes money, **debt is being reduced** or it may **even be debt-free.**
- ❑ The company is **growing modestly** (under **15% sale increases year-to-year**) or its **volume fluctuates**, but it is **able** to **finance** this modest growth **internally**.
- ❑ The company is **large enough** to **maintain** its **position** in the marketplace and **earn at least average profit margins** compared to its peers.
- ❑ The risk of **failure** is **minimal**, and the **personal assets** of the owner are **no longer the sole basis** of **credit**.
- ❑ Managers have responsibilities and are functioning at a **high level.**
- ❑ The **founder is still in charge** but may have some time to pursue personal goals if he or she chooses.
- ❑ There may be a **tendency** to overspend, particularly on benefits and bonuses.
- ❑ The **greatest risk** the company faces is maintaining enough cash to deal with tough times if those were to occur.

Stages of growth – Success

- ☐ If the company has **continuous growth** at a pace of 15% or less,

  the **contractor** usually **remains active** in strategies and organizational issues, and is **committed** to the established demands on their time and energy.
- ☐ **Owner time** and **energy demands** vary from organization to organization but are usually **less than** during startup or survival stages.
- ☐ **Employees** may have difficulty advancing during this stage because the organization has **leveled off** and is **stable**.
- ☐ At this stage, **profits are made** by maintaining business-as-usual and managing risk and causing cash, revenue, and equity to grow.

Stages of growth – Growth

- A company in the **growth stage** is increasing its **annual sales by 15% or more** (on top of inflation).
- Depending on the rate of growth there is a **risk of becoming unprofitable**, at which point the firm would **return to the** survival stage (*regardless of whether that backward move is acknowledged by management*).
- The **major issue** in growth is financing that growth or expansion.
- **Debt** is almost always **increasing**

  because growth consumes cash,

  working capital is strained, and

  retainages increase.
- **Working capital** can improve if **growth stops** at a plateau.
- **Cash flow** is often a problem in the growth stage.

Stages of growth – Growth

- ☐ This can be **discouraging** for the **entrepreneur** that has spent time in the success stage where **cash was plentiful.**
- ☐ There will be an **increase in debt to equity ratio** that can impact **bonding** and **banking relationships.**
- ☐ The ability to **delegate authority** becomes critical, because in this stage there are **more people to manage**.
- ☐ This is a **difficult transition** for many entrepreneurs, particularly those w**ho have not had to delegate in the past** or have difficulty in delegating at all.

Stages of growth – Growth

- ❑ The **“growth stage contractor”** must begin to **decentralize**.
- ❑ **Existing** systems and procedures become **strained**;

  replacement systems often become **overloaded** before they are operational.
- ❑ **Long-range planning** is critical and must include the **participation of key managers**,

  but **time** for planning is usually in **short** supply.
- ❑ The company is **still dominated** **by the owner(s)**,

  but **other key people** have an important role in management, operations, and hopefully decision-making.
- ❑ The **growth stage is a difficult one**.
  - ❖ **Demands** on owner time and energy are **high**.

Stages of growth – Maturity

- ❑ A **construction company** seldom reaches the **maturity stage** during the **first generation** of leadership.
  - ❖ It is **usually** the **second generation** or even later.
- ❑ The **mature company** has competent, self-reliant management and is large enough to **dominate a market**.
- ❑ **Debt is modest**, and the company's course is charted through **formal strategic planning.**
- ❑ The **management structure** is clearly defined and most likely **decentralized** and **departmentalized.**
- ❑ **Separate** profit centers, departments, divisions, or operational units provide necessary **opportunity** and **training** ground for **future managers** of the company.

Stages of growth – Maturity

- ❑ **If** a company in the **mature** stage begins to grow at a rate **greater than 15%**, it shifts **back** to the growth stage.
- ❑ If that **growth** creates **losses** or **substantial debt**, the company **may reenter** survival stage, regardless of its size and reputation, and regardless of whether management recognizes it or not.
- ❑ **Mature companies** are not always the most profitable contractors in their market.
- ❑ **Companies managed** for long periods of time **under effective systems** and **controls** do not need, and often may not have, **very strong leadership**, or **may lose** determination and enthusiasm.
  - ❖ However, that is not always the case.

Key considerations in various stages of growth

- ☐ As a construction company matures, there are **various considerations** that **management needs to account** for to lead the company through its current stage and **keep it profitable.**
- ☐ These include market factors and business resources, as discussed next.

Key considerations in various stages of growth

- ❑ **Depending on the life cycle stage** the company is in, the **market factors that competitors face** can affect each company **differently**.
- ❑ A favorable construction market may **encourage growth**;

  however, **growth over 15% per year** can shift a company from one stage to another.

  - ❖ If **management doesn't sense the shift**, it may be making incorrect assumptions to inform its management actions and decision-making.

Key considerations in various stages of growth

- ☐ For instance, a **successful company** in **rapid growth** may be forced to **increase debt** to **finance** the expansion, and

  as a result the firm will **shift** from the success stage to the survival stage**.**

- ☐ If management does **not realize** that the **shift** has happened,

  it could be **disastrous** because a company in the survival stage **must be managed differently**

  than a company in the success or growth stage.

Key considerations in various stages of growth

- ❑ **Organizations shifting** from one stage to another **without**
  1. A change in resource allocation and
  2. A recognition of the necessary shifts in management practices

  often run into **difficulty**.

- ❑ Even **modest** or **partial shifts** form one stage to another **create challenges** if the **change** is **not recognized** and **managed** accordingly,

  because an **organization** in **transition** may be in two stages at once,

  adding a **layer of complexity** to managing the business.

Key considerations in various stages of growth

- ☐ This may explain **some industry confusion**, such as **why some contractors** need to **work long hours** each day to keep their business operating

  while others play golf and **their business** goes along **on its own**; and

  why some organizations **manage without** any formal systems or strategic planning

  while others rely heavily on planning and systems for their success.

Key considerations in various stages of growth

- ☐ For example, **long-range planning** is essential to a company in its <u>mature stage</u>, but can be viewed as a **distraction** for a <u>startup</u> where the contractor is **living day-to-day** and needs **all their time** to operate the business as **opposed** to **plan for the future.**

Key considerations in various stages of growth

❑ **Primary business resources** for management to consider are:

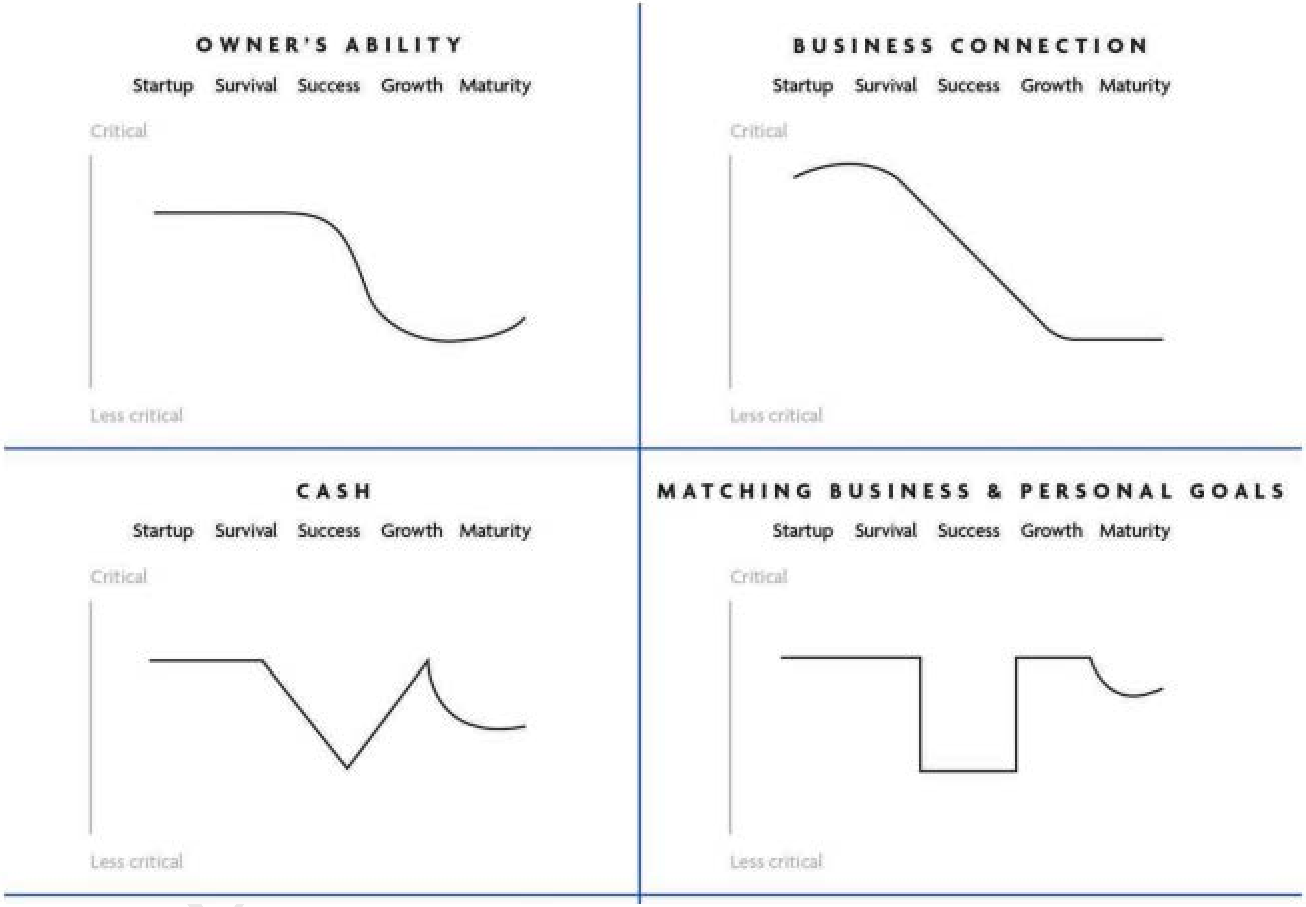
- ❖ Owner’s ability
- ❖ Business connections
- ❖ Cash flow
- ❖ Matching business and personal goals
- ❖ Quality of and diversity of employees
- ❖ Owner’s capacity to delegate
- ❖ Strategic planning
- ❖ Systems and controls

Key considerations in various stages of growth

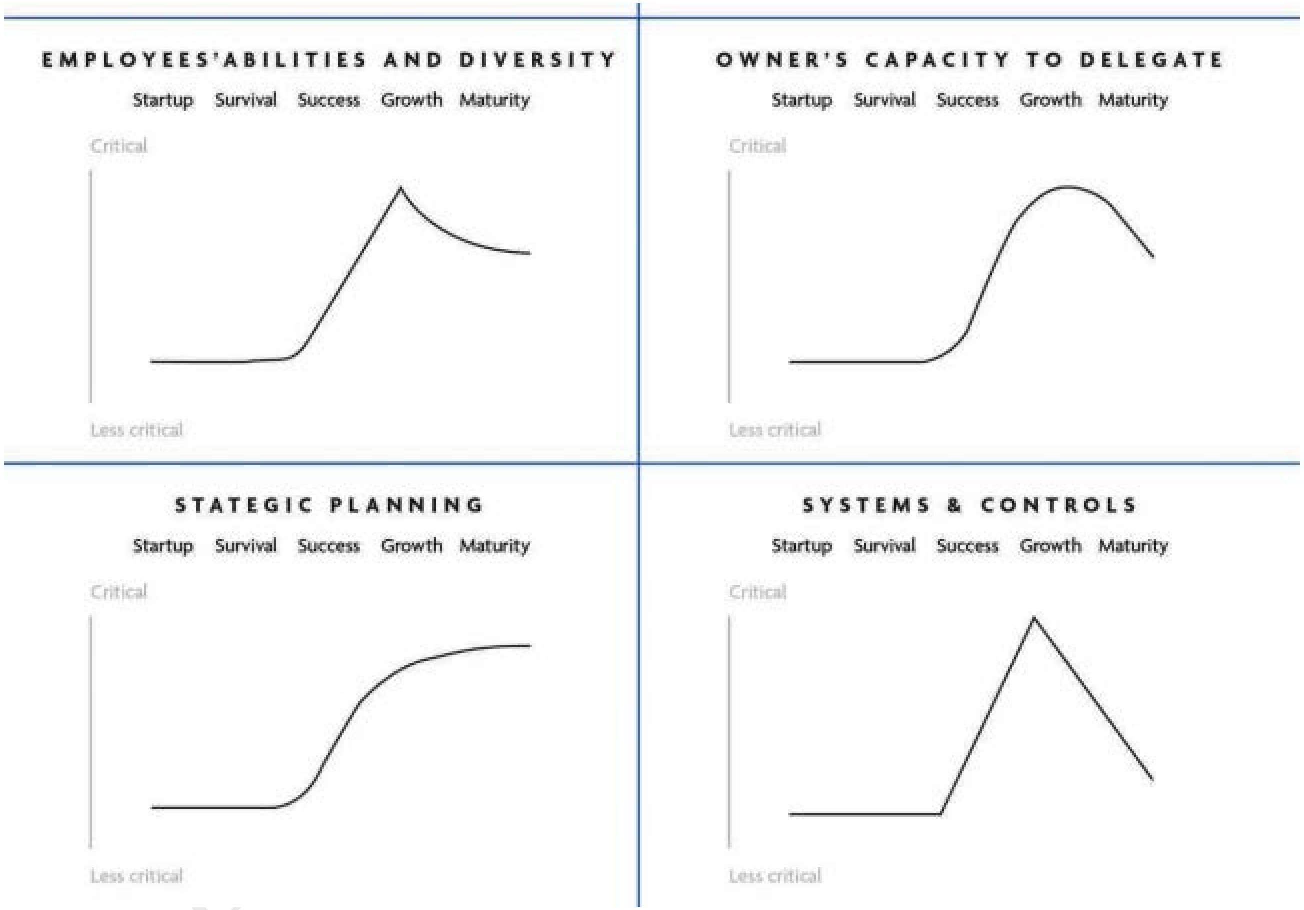
- ❑ Next is a **discussion** of each of the business resources that a construction company must have in order to be successful,

  including an illustration **depicting the importance of each** during different stages, as shown in Figure.

Key considerations in various stages of growth

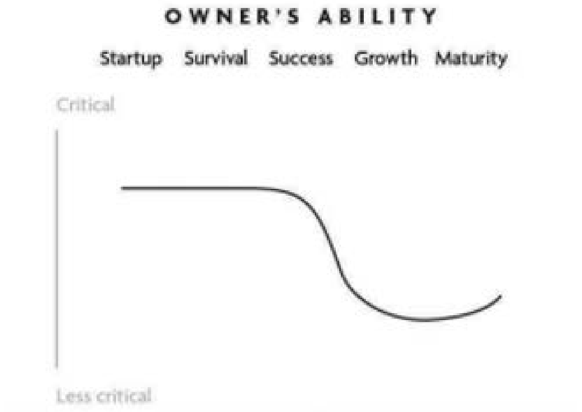


Key considerations in various stages of growth



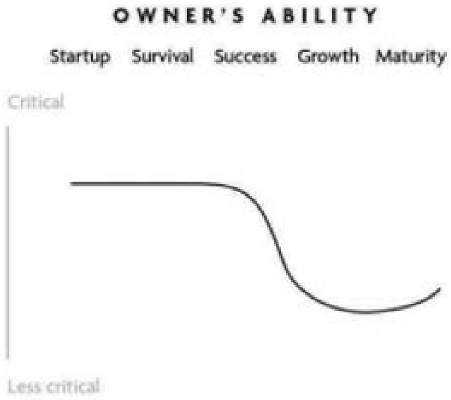
Owner’s ability

- In the **early stages** of a business, the **owner’s ability** to do whatever the company **specializes** in may be the **only resource** the company has.
  - If the **owner’s ability** is **sufficient**, the contractor can **sustain** a **startup company**.
  - It becomes **less important** in the **later stages** where **qualified** managers and skilled staff are necessary for survival



Owner’s ability

- A **mature** construction company can **exist** for **generations** **absent** a **strong owner’s ability**,
  - **because** qualified executives, appropriate systems, and adequate controls manage the business.
  - ❖ However, **if a company shifts** from the mature stage to growth or survival,
    - the **owner’s ability** and **leadership**,
      - which may **not have been called** upon for some time, become **critical to success**, again.



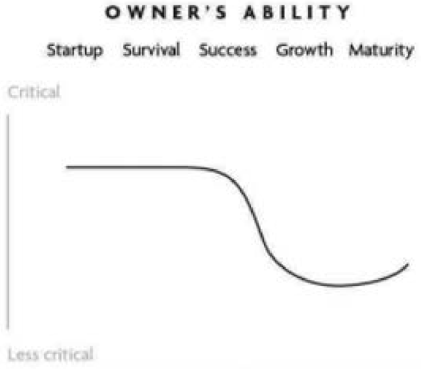
Owner’s ability

- ☐ As shown in the **top left corner** of Figure, the **owner’s ability** is **critical** during both startup and survival.
  - ❖ Having **one** or **more owners** makes **little difference**;

    what matters instead is that the **founder(s) have a reasonable** and **aligned vision** of the product or service they intend to “sell,”

    is/are **capable** of running a business, and

    is/are **driven enough** to stick with the hard work and long hours it takes to **launch a new business**.



- ☐ **Profitability** in early stages is **rare**,

  so patience and perseverance are tested, **potentially for years**.

Owner’s ability

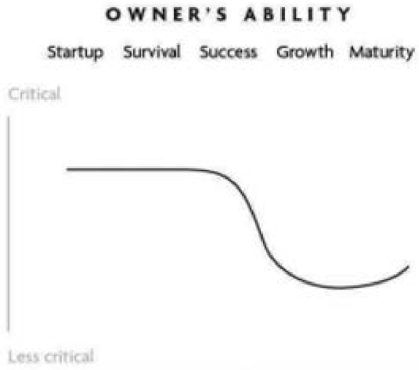
- ❑ The construction business **failure rate** at <u>startup</u> is **worse than 50%**, which is comparable to **most new business startups**.
- ❑ The **owner’s ability** to do whatever it takes to succeed is **most critical** in the <u>early stages</u> of the company’s life cycle.
  - ❖ And for obvious reasons that **continues** through the **difficult stage** of <u>survival</u>,

    until

    1. Stability,
    2. Profitability, and
    3. Positive cash flow

    are achieved and

    the **firm enters** the <u>success stage</u>.



Owner’s ability

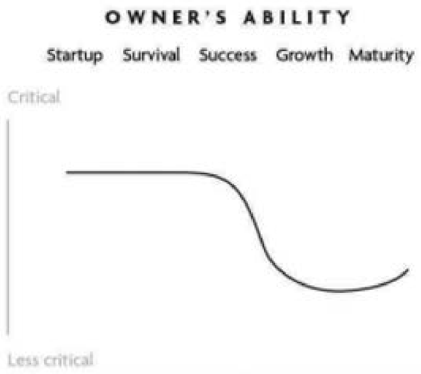
- ☐ In the success stage, the **owner’s ability** **matters** but is less critical,

  because in order to have arrived to the success stage,

  the firm has **some qualified employees** who assist to some degree with the management of the operations.

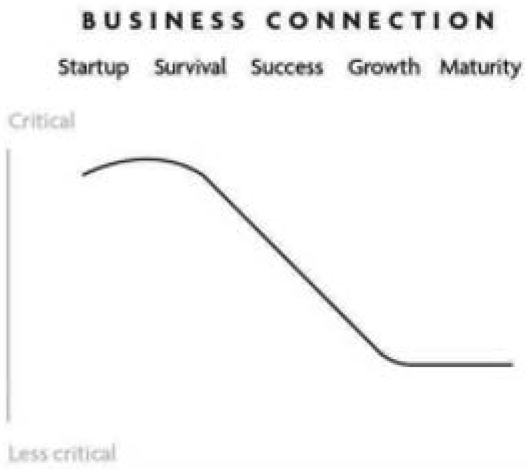
- ☐ If that **assistance** reaches a **high degree**,

  the **owner’s ability** becomes **less critical** because **qualified** employees’ abilities combined with **systems** and **procedures** that may have been introduced are **carrying** **some** or **most** of the **load** at this stage and beyond.



Business connections

- **All companies need business connections**, sometimes referred to as business resources, such as
  - a customer base,
  - relationships with subcontractors and suppliers, and
  - a **strong reputation** in the **marketplace**.
    - However, the **importance** of such **connections** changes as the company **develops** and **matures.**

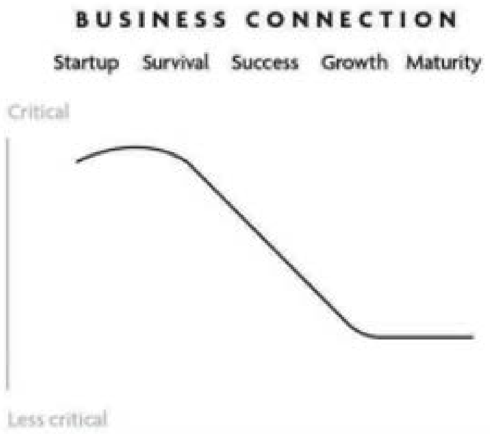


Business connections

- **Loss of even one** customer can be **devastating** to the startup or even the survival stage company with limited business connections.
  - ❖ This is in **contrast** to a company that has reached the **success stage, growth stage, or mature stage**, and

    is **better able** to **withstand** such losses, as

    it has **multiple business connections** and by definition is established and **has some reputation** in the marketplace.

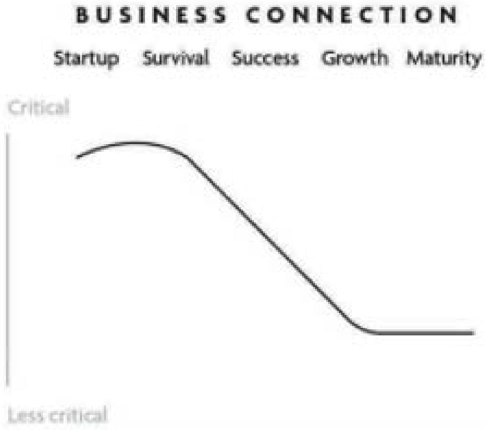


Business connections

- ❑ **Business connections** at a startup construction firm may be **few** or **nonexistent**,
  so **making positive connections** with subcontractors, suppliers, and customers is **critical** because without them the business will **not continue**.
- ❑ Due to their **size** and **short time** in the **market**, startup construction firms **initially offer limited business** to subcontractors and suppliers.
  - ❖ Therefore, they may need to **put additional effort**
    to **get** the attention and interest of those subcontractors and suppliers to do business with their new firm, and
    hopefully to **extend credit** in some circumstances.

Business connections

- ❑ **Some potential customers** may **avoid** doing business with a startup, and the **new firm** is **obviously unknown** to most of the customers that can use their product or service, so those **connections** are **clearly critical.**
- ❑ A **banking relationship** is critical because financial support is usually **required** at startup.
  - ❖ Moreover, if the work is required to be bonded, **surety connections** are in that same category.



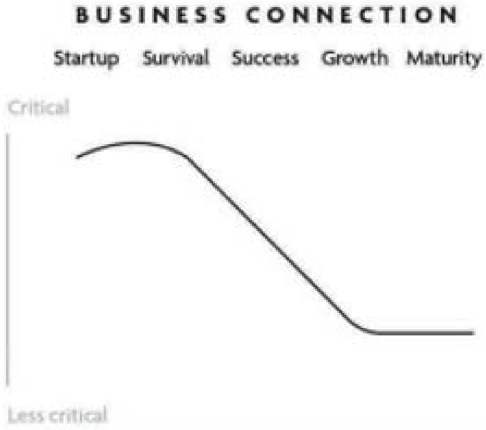
Business connections

- ☐ Basically, a **new firm** is **entering** an existing business community that they **need to function in,**

  but the business community probably does **not need** the **new firm** as much as the **new firm needs them**.

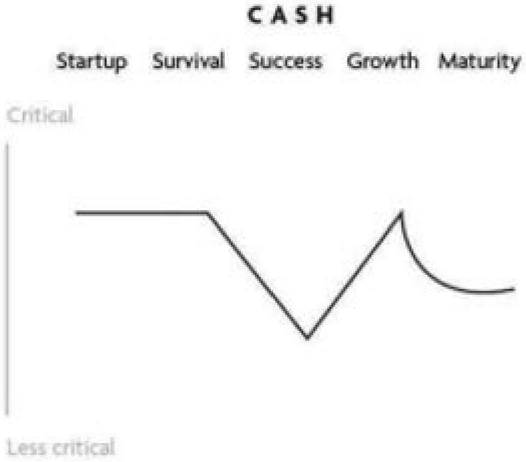
  - ❖ **As** the company matures,

    it **becomes a member** of the construction business community and these **connections develop** and therefore become **less of a risk**.



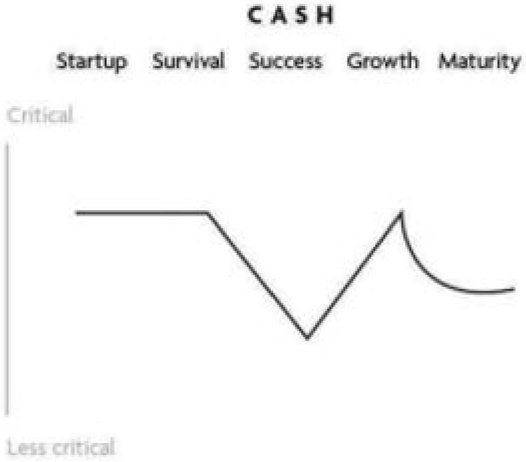
Cash flow

- ☐ Startups often **cannot** get **enough** cash and credit.
- ☐ In survival, the challenge is to **generate** or **borrow enough cash** to
  break-even and cover
    the **cost** of replacement of equipment, and
      to eventually **earn enough** to **finance growth** to a size that provides
      an **economic return** on assets and effort.
- ☐ In the success stage, **enough cash** is **earned** to reduce or eliminate debt,
  but overspending is sometimes a **problem**.



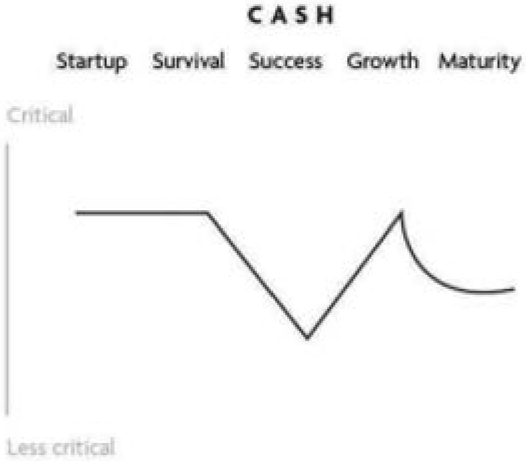
Cash flow

- ☐ In the growth stage, **cash is short again** and there is a tendency to **over-borrow.**
- ☐ In the mature company, **cash flow meets all business needs** and there may be some **modest debt** in the capital structure.
- ☐ **Managing cash flow** is easier if there is an understanding and **anticipation** of the **different demands** in the various stages of growth of the construction company.



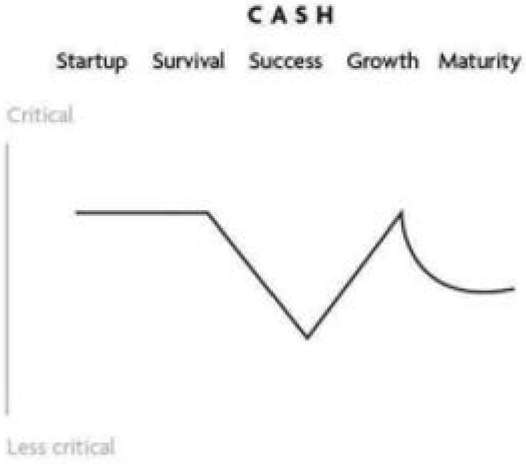
Cash flow

- As shown in Figure, the **need for cash** on the chart starts high on the critical scale, as **most** startup construction companies need **more cash** than **originally planned**, and this criticality **continues** into the survival stage.
- A startup makes it through **survival** when cash flow **begins** to **improve**, and **if** the **improvement continues**, the firm enters the success stage.



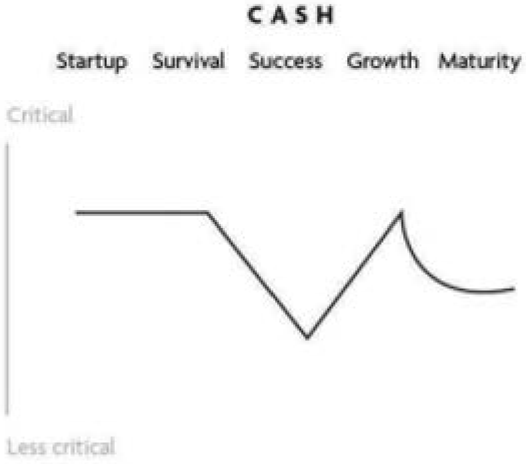
Cash flow

- ☐ Once the organization **gets** to **profitability**, **negative cash flow** actually persists **because** work is put in place **before it can be invoiced**, and customers do **not pay** instantly.
- ☐ Startup business **owners** should know that even with **initial success** they should **plan** on generally having **negative cash flow** for a **minimum of two years**, with the average **being closer to three years.**



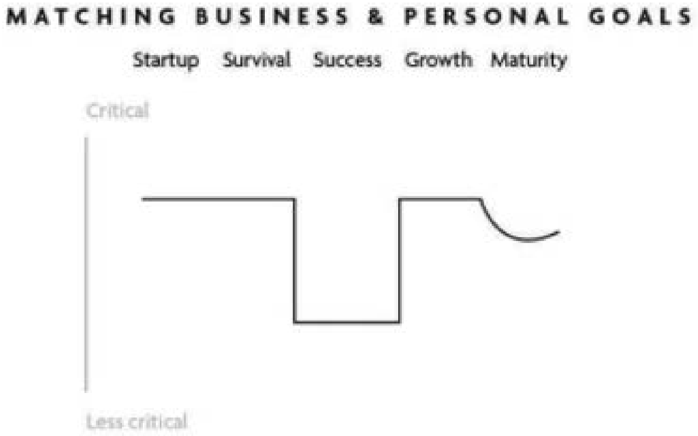
Cash flow

- ❑ In our **experience**, for a **new** construction business to recover all costs from startup forward, and achieving **break-even**, typically takes **two** to **four years**.
  - ❖ Those that do **not break-even** in **four** to **five** years usually stop trying



Matching business and personal goals

- As harsh as it sounds, the startup contractor usually has to put **personal goals aside** except for the desire to succeed in business.
    - When a **contractor** is **unwilling** to do that, or when their personal and business goals are **out of alignment**, there is **reduced focus on the business** and **reduced potential for success**, particularly in the startup, survival, and growth stages.



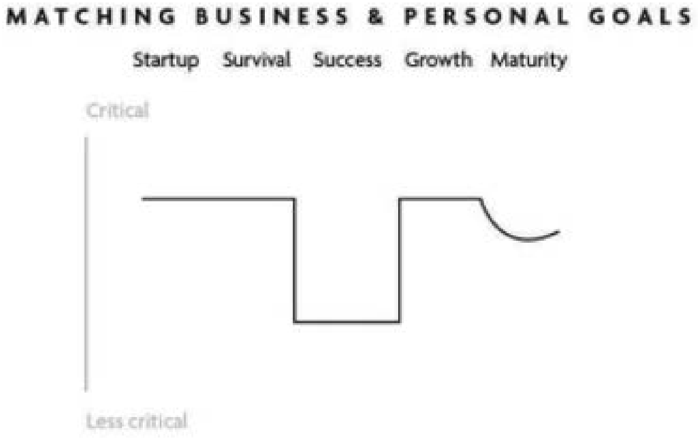
Matching business and personal goals

- ❑ **Figure shows** that **matching** a contractor’s business and personal goals is **critical** at the startup stage and **remains** critical through the survival stage.
- ❑ If **sacrificing personal goals becomes too much** for the business owner, and he or she **decides it is not worth** it,

at any time during **startup** or **survival**, they either

quit or **withdraw energy** from the effort, and

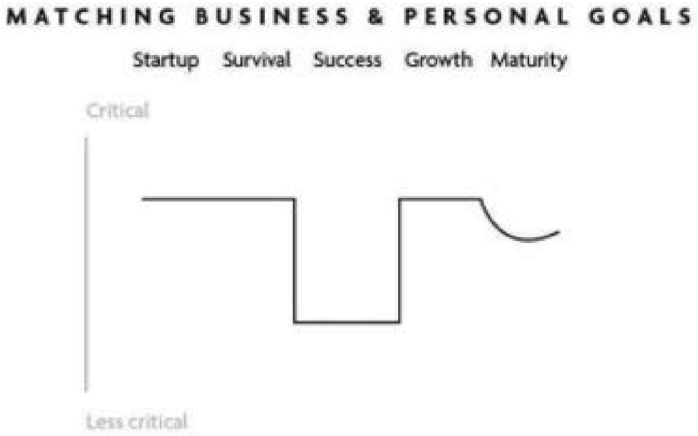
the **company typically fails**.



Matching business and personal goals

- ☐ When the **company** enters the success stage, the **matching** of goals is **less critical**.
- ☐ The **time demand** on the business owner is reduced,

  making the **matching of business** and **personal goals** relatively less important to the company’s success.
- ☐ The reason is the **company is stable with positive cash flow** and **moving out of debt**, so there is some time available for personal interests.
  - ❖ **Not every** entrepreneur **takes** the **time**, but either way it typically **won’t impact** the **company** as **much.**



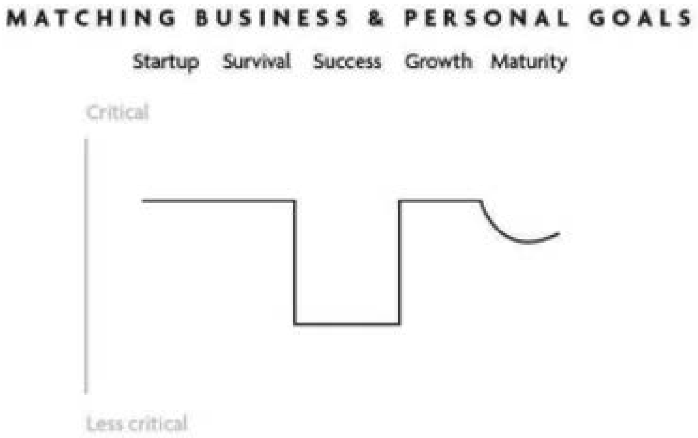
Matching business and personal goals

- In the success stage there is **some freedom**,

  but **not if** the company **begins** to grow at a rate in **excess of 15%,** as this may signify a **shift** into growth mode**.**

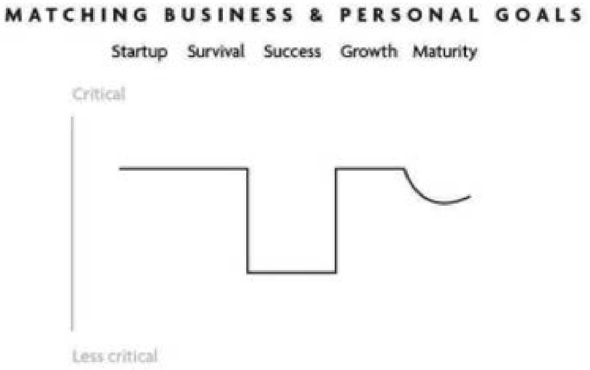
- **Note** that **matching** business and personal goals immediately returns to **highly critical**

  if the firm enters the growth stage because of the **need for leadership** attention during growth.



Matching business and personal goals

- ☐ In the mature company, **matching** owner business and personal goals is generally **less critical**,
  - but again if a **decision** is made to **expand**,
    - the company **principals** must be prepared to **set personal goals aside** because of the time demands of the **growth stage**.
- ☐ If a firm spends a **long time** in the mature stage,
  - the organization sometimes **relaxes too much**, and
    - the **curve turns up again** which **signifies leadership attention** is required to **renew the firm's energy**

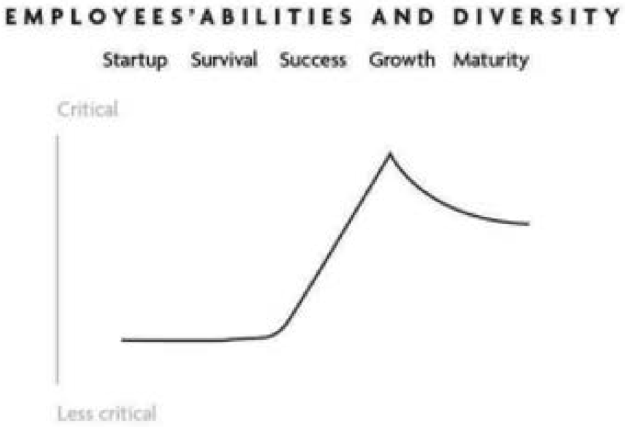


Caliber and diversity of employees

- From startup through success, contractors typically **run everything themselves**, and that may be the **best approach** to **succeed** during the **early stages** of the firm’s life cycle.
- The **owners** are **overworked** and have **no free time**, but that rarely changes during the early stages because their company’s **success** depends in **large part** on themselves.
- **After getting used to** doing business this way,

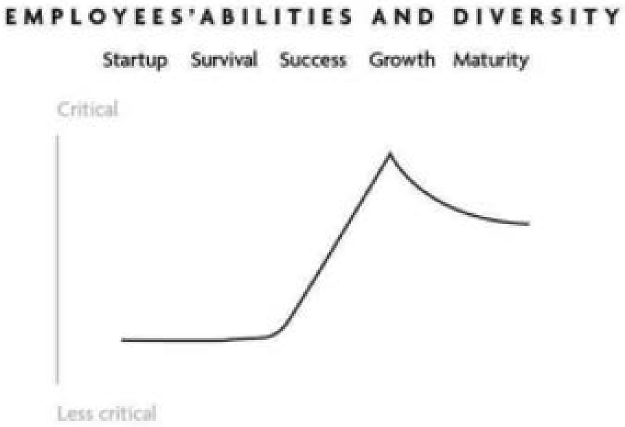
  the business owner may have **difficulty** moving on to the **growth stage**, which demands the ability and willingness to

  1. **Attract qualified** people and
  2. **Delegate authority** to them.



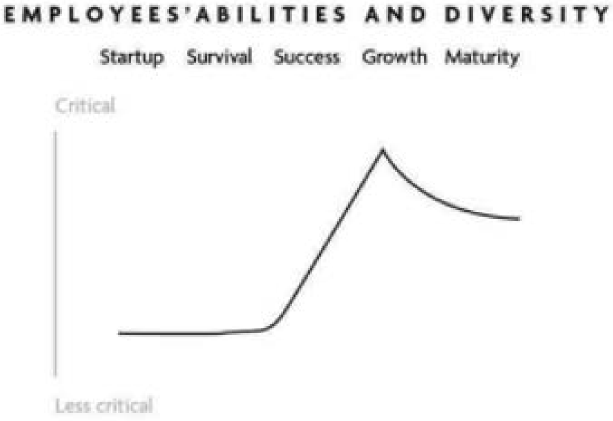
Caliber and diversity of employees

- ☐ In the growth stage, the **caliber** and **diversity** of employees become the most **important resource** for continued expansion and success.
- ☐ In the maturity stage, the **abilities of the staff** remain critical and **even more** important than the **abilities of the owners** themselves.



Caliber and diversity of employees

- As shown in Figure, the **abilities** of **employees** are **less critical** at startup and through survival, **compared** to during growth and maturity stages.
- The reason is that **success** in these startup and survival stages is very much **dependent** on the business **owner** who has the vision and the responsibility to execute it.
- It is certainly an **excellent** asset to have high-caliber employees, but at this stage they **generally have less influence** on the ultimate success of the firm, **compared** to their influence during the growth and maturity stages.



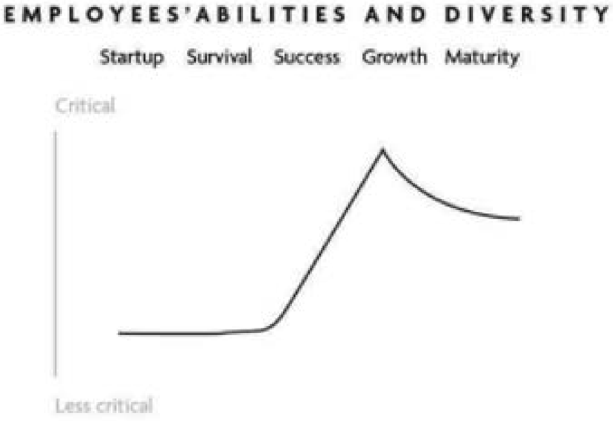
Caliber and diversity of employees

- ❑ Once in the success stage,

  if the business **owner decides not to grow** the company,

  they can **continue running** the business themselves and the **need for high-caliber employees increases slightly** as the firm becomes **moderately larger**.

- ❑ If the construction firm becomes **departmentalized**, the importance of **high-caliber** employees **becomes critical**.



Caliber and diversity of employees

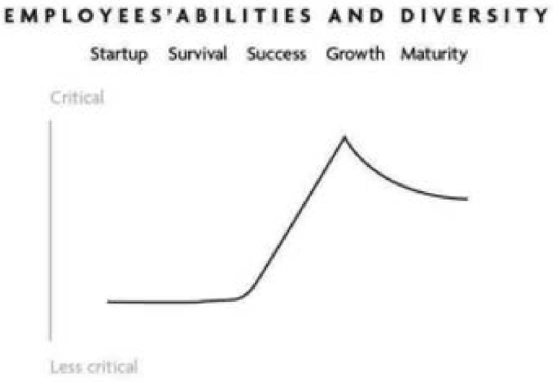
- If the firm enters the growth stage, success becomes **almost totally dependent** on the **abilities of employees**.
- Note that this category **drops off** some in maturity

  because mature firms have **fixed systems** and **procedures**

  that **force** standardization,

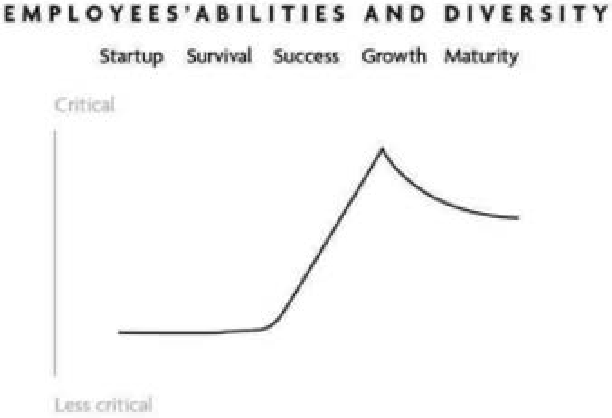
  which **reduces** the impact of individuals to some extent, as long as they **follow** the **established processes and systems**.

  - ❖ However, both in the growth and maturity stages, the a**bilities of the staff** are even **more critical** than the abilities of the owners.



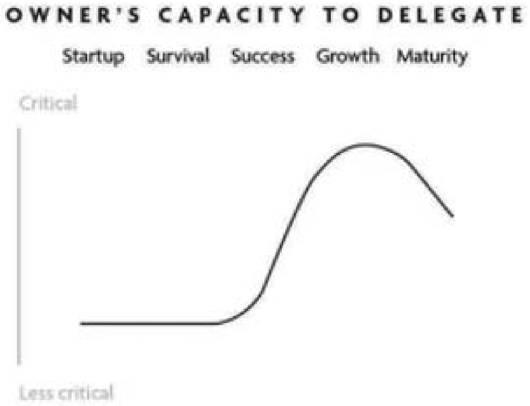
Caliber and diversity of employees

- ❑ As discussed earlier, a mature construction company in **financial difficulty** **reenters** the **survival stage.**
  - ❖ In the survival stage, having a **strong independent leader** is critical.
  - ❖ A **strong leader** is **not necessarily** required in a mature company and there may not be one at the helm, but **if a leader** does **not step forward** in the event of **financial difficulty**, the **mature company may reenter** the survival stage and have difficulty managing through it.



Owner's capacity to delegate

- ☐ During the startup and survival stages, **contractors** rely on **themselves** for success and **delegate little** authority to others.
  - ❖ There **may** be **quality people** in the organization during these stages, **but** the **prosperity** of the organization lies with the **owner** in most cases.
    - ✓ This **becomes problematic** when the owner is **not willing** to **adapt** when their company enters the growth stage.
      - o The **owner's inability** or **unwillingness** to delegate authority to others is a **common cause** of **business failure** during the growth stage.

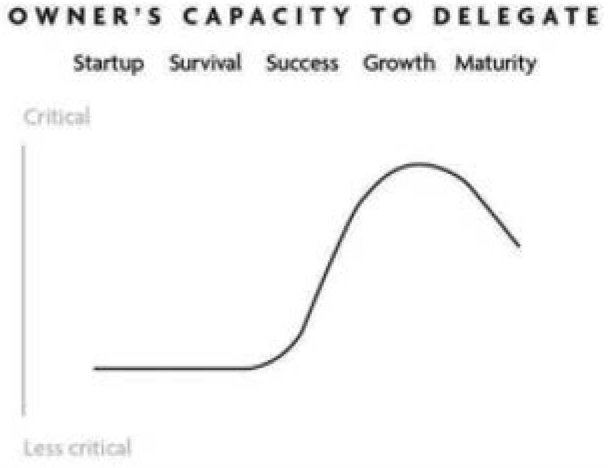


Owner’s capacity to delegate

- This **discussion** does **not imply** that contractors in the early stages of their company’s life cycle do **not delegate**.
    - It **simply means** that delegation is **not as critical** during these stages, as shown in Figure.
- Notice that in the maturity stage the **criticality decreases** somewhat because,

  as with **quality** of **employees**, mature firms have **processes** and **systems** that force **standardization**,

  which **reduces the impact** as long as employees follow the **established processes** and **systems.**



Strategic planning

- ❑ **Strategic planning** becomes **more** and **more critical** as the construction company **progresses** through its life cycle stages, as shown in Figure.
- ❑ In the startup and survival stages,

  the **entrepreneur is typically running** the company and

  doing everything by himself/herself with **limited resources**.

Strategic planning

- ☐ A detailed strategic plan could be viewed as **restrictive**, as the **organization evolves** based on where the market, customers, or other circumstances dictate.
  - ❖ In these **early stages**, there is **limited control** over how, and in what direction, young construction enterprises will advance.
    - ✓ So, one could argue that **planning is of less value** than in later stages.

Strategic planning

- **Strategic planning** becomes **more important** for a contractor when his or her firm is in the success stage.
- **Business planning** is critical if prosperity and stability are to be **maintained over time** and as the organization becomes **less reliant** on the owner’s ability.
- Planning is also essential in the growth stage to supervise the **increasing number of people** who will manage the expansion.
  - **Finding time** to plan is usually an issue, but it is **needed to maintain** the firm’s **prosperity**

Strategic planning

- The mature company relies heavily on **long-range** **strategic planning** for its success and stability.
  - **Management** and **owners** have the time to **devote** to **planning**, and it is usually a formal process.

Strategic planning

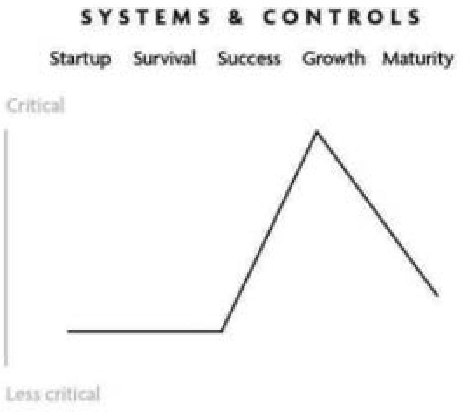
- A **mature** company pushed back into survival for any reason will have **less use** for its **long-range strategic plan** because,

  by definition, a company in **survival** has **limited assurance** of a future.

  - At that point, it could be **erroneous to stick** to the long-range plan because it may **not contain** the ingredients for survival management.

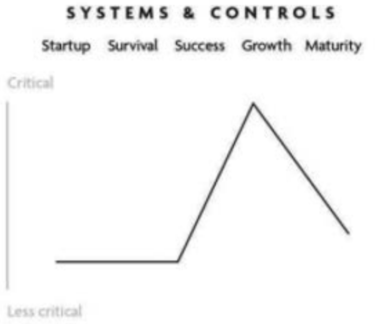
Systems and controls

- Systems and controls are **how strategic plans** are **implemented**.
  - They ensure that what is agreed-upon in the long-range business plan is **actually executed.**
  - They are, therefore, of **less importance** in the early stages of development such as startup and survival, because **all control** typically resides with the **business owner.**
    - ✓ But they are **increasingly significant** as a construction company progresses through the later stages of success and growth.
      - Systems and controls can become **burdensome**, however, if a company finds itself **back in survival** where **fast-moving decisions** must be made and **implemented** by a leader with limited consultation with others and without regard for existing processes.



Systems and controls

- **Systems** help manage the company and its employees.
  - There are **few employees** in the early stages, and they typically **receive instructions** directly from the **owner**.
  - In the growth stage, systems and controls begin to become **more critical** as the construction firm begins to **departmentalize and expand**.
  - Systems and controls are **absolutely critical** until strategic planning is initiated, at which point they **become less critical** because strategic business planning **places** systems and controls into a **logical** and **mandatory order to be executed**.
    - ✓ **Strategic planning** might be described as the **ultimate form** of systems and controls.

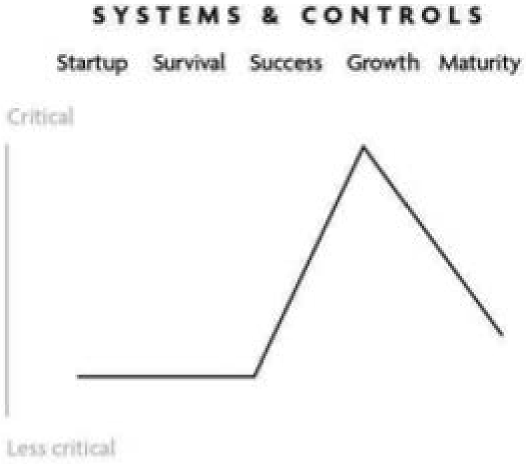


Systems and controls

- ❑ Showing systems and controls in Figure as becoming **less critical** in a mature construction company does **not mean they are eliminated,**

  but instead means that they are **formalized** to the extent that they are amalgamated into the **strategic plan**

  which **formulates** the **mandatory guidelines** for the whole organization to function under.



Reverse progression

- ☐ Companies can go **back into** stages they have already passed through.
- ☐ When a mature construction company experiences growth greater than 15%, and debt increases for a year or more, it **reenters the growth** phase.
- ☐ A growth-stage company often **returns to the success** stage after expanding for a time.
- ☐ If a success, growth, or mature-stage company encounters **financial difficulty** where **equity** is plummeting rather than growing, or **debt spirals out of control**, it reenters survival stage.
  - ❖ Whether management **recognizes the shift or not**, the shift is still real.

The dangers of distraction – Too much of a good thing

- ❑ This **final concept** is only prevalent in the **“success” stage**.
- ❑ **Everyone reacts differently** to success, and **self-made prosperity** can have unexpected side effects.

The dangers of distraction – Too much of a good thing

- ❑ **Entrepreneurs** get totally **immersed in building their business**, and it becomes the **central focus of their life**.
  - ❖ If **success is achieved**, some have **difficulty** if they find themselves with **less to do**,

    particularly if it is the first time in their life that they have had **excess disposable income.**
    - ✓ Some have become **distracted from their businesses** with disastrous results.
      - o **Numerous** construction businesses have **failed after** the founder/contractor became **diverted from the business**, or **lost interest** in the business.

The dangers of distraction – Too much of a good thing

- ☐ **Common diversions** include golf, sailing, gambling, politics, affairs, or whatever outside interests the entrepreneur may have.
  - ❖ In one instance, a contractor became so caught up in a **trade association** he **spent as much as half** of his time at meetings, retreats, and other organization activities with almost a **cult-like attraction to the group**.
  - ❖ Another contractor, after achieving success, became involved in **politics** and was **elected mayor** of the small town he lived in, which took up an **inordinate potion of his time.**

The dangers of distraction – Too much of a good thing

- ☐ The **typical subjects** were self-made, hard-driving, type A personalities who spent **most of their early careers** building their construction businesses at the **cost of** personal, family, and social activities.
  - ❖ Many had **little in the way of financial advantages** early in life.
    - ✓ The **distraction** away from the business as the center of their life **started as** they accumulated considerable disposable income for the first time, with **limited time to enjoy** it.
      - o These contractors were **typically in their 40s or older**

The dangers of distraction – Too much of a good thing

- ❑ **Hard driving** at work can lead to **hard playing** at activities that can become **addictive**.
  - ❖ Most did **not notice the obsession**, or they **were sure** that it was **not affecting** their business.
    - ✓ **Self-made success** seems to **convince people** that they **can do anything well**, including managing their business and **whatever else they would like** to do.

The dangers of distraction – Too much of a good thing

- ☐ When the **distraction increases** and becomes **noticeable to others**, it is **seldom perceived** by the **contractor** who generally **rejects the advice** of subordinates and others concerning it.
    - ❖ In the book, Managing the Profitable Construction Business (Schleifer et al., 2014), this is a **common element** of construction business **failure** under the heading of **“lack of managerial maturity.”**

The dangers of distraction – Too much of a good thing

- ☐ **Prevention** of this phenomenon is **difficult** because
  - **Convincing** strong-willed entrepreneurs that they are at risk from this is **extremely difficult**, and
    - **intervention** once the distraction occurs is usually **aggressively resisted.**
- ☐ Many small and midsize contractors have little accountability to anyone, so the institution of a **Board of Advisors or Board of Directors** is an excellent prevention **against diminishing interest** of the founder or leader.
  - ❖ As described elsewhere in this course, an **independent board** is in a position to **observe changes sooner**, and
    - if **trusted** and **relied** upon, may be in a position to **impact the outcome.**

Exercises

Exercises

- ☐ Explain why a company cannot choose or decide what stage it is in.
- ☐ Explain how a company can ship a stage in reverse progression.
- ☐ What is your opinion of the section on dangers of distraction?

Company Organization

Introduction

- ☐ The selection of a form of business organization and of an appropriate organizational structure are **basic** management functions of construction company leaders.

- ☐ The most appropriate organizational structure is the one that best fits
  1. The business culture,
  2. The operating practices, and
  3. The business plan

created by the company leaders.

A company's size, scope of services, and geographic market area also will influence the type of structure selected.

Introduction

- ☐ The organizational structure will
  1. Determine how employees do their work and
  2. Establish relationships among organizational elements.

- ☐ In this section, we will examine the alternative forms of business organization and the types of organizational structures that may be selected for a company.

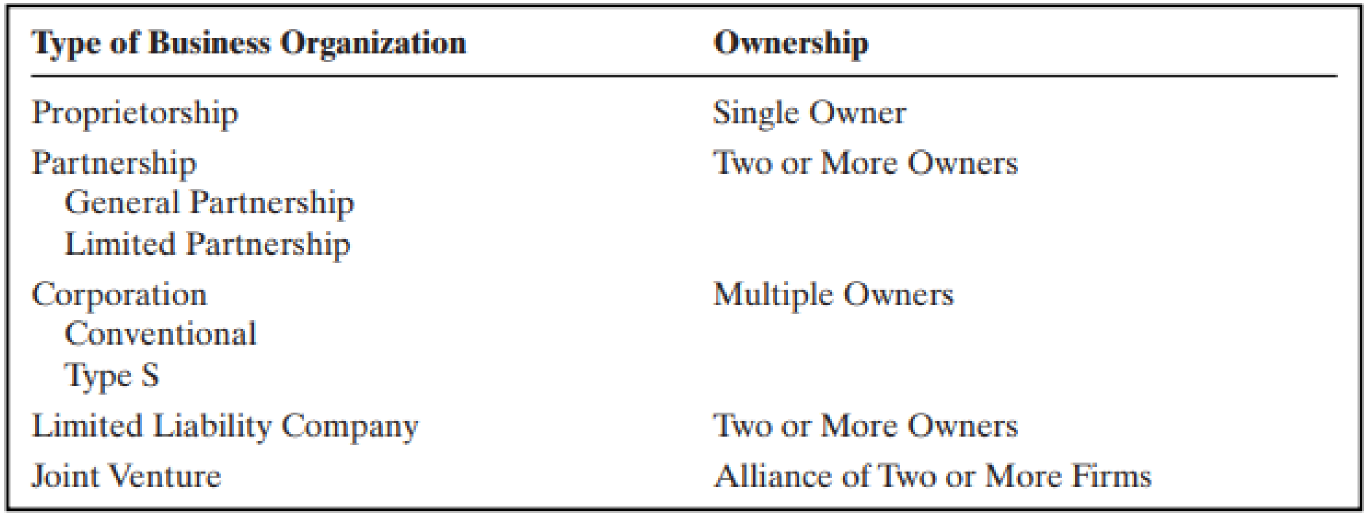
- ☐ Then we will discuss the development of an organization chart and operating procedures for a construction firm.

Alternative forms of business organization

☐ **Important factors** to consider in selecting a form of business organization are

1. The amount of **capital** needed to establish the company.
2. The **nature** and **magnitude** of **potential liabilities** to be faced by the company.
3. The **number** of **owners** anticipated.
4. The **extent** of the **owners' participation** in the management of the company.
5. The **tax consequences** of the various forms of business organization.

Alternative forms of business organization



Type of Business Organization	**Ownership**
Proprietorship	Single Owner
Partnership	Two or More Owners
General Partnership	
Limited Partnership	
Corporation	Multiple Owners
Conventional	
Type S	
Limited Liability Company	Two or More Owners
Joint Venture	Alliance of Two or More Firms

Alternative forms of business organization – Proprietorship

- **Proprietorships** are companies that are owned by **one individual**.
- They may operate under the name of the owner or may use a trade name.
- This form of organization is the **easiest** and **least expensive** to establish and **enjoys** the maximum freedom from government regulation.
- **Sole proprietors** need not maintain business records except those necessary for **tax purposes**, because, unlike corporations, they are **not required to file annual reports** with government agencies.
- Proprietors must, however, **maintain records** documenting income and expenses.
- The **organizational structure** of a proprietorship is whatever the owner wants it to be.

Alternative forms of business organization – Proprietorship

- ☐ The **proprietor**
  1. Owns and operates the business,
  2. Provides the necessary capital, and
  3. Furnishes all equipment and other capital assets.
- ☐ All business transactions and contracts are executed in the **owner's name**.
- ☐ The **owner** is **personally liable** for any liabilities incurred by the company.
- ☐ This **unlimited liability** extends to the owner's personal assets,

  even though they may **not** be involved in the **business**.
- ☐ The **individual** and the **proprietorship** are not recognized as being separate under the law,

  even if the business operates under a **trade name.**

Alternative forms of business organization – Proprietorship

- ☐ The **proprietorship continues** until sold, abandoned, or the death of the proprietor.

- ☐ Continuity of operation in the event of the **death** of the **proprietor** may be achieved by a direction in the **proprietor’s will**; that is, if the executor is
  1. Directed to operate the business until sold or
  2. Transferred to the individual specified in the will.

Alternative forms of business organization – Proprietorship

❑ **Advantages**

1. Easy and inexpensive to establish
2. Minimal start-up costs
3. Total control by owner

Alternative forms of business organization – Proprietorship

❑ **Disadvantages**

1. Unlimited liability of owner
2. Business terminates on death of owner
3. Difficult to attract capital due to lack of successor management

Alternative forms of business organization – General partnership

- ❑ A **partnership** is an association of **two or more persons** to conduct business as co-owners.
- ❑ Although it has **its own** assets and conducts business,

  a partnership, **unlike** a corporation,

  is **not treated** as a legal entity **separate** from the **individuals** forming the partnership.

  - ❖ This **pooling of financial resources** offers the potential for conducting **larger construction operations** than would be possible for the partners individually.

Alternative forms of business organization – General partnership

- A partnership is **not** recognized by law as being an **entity separate** from the partners.

- **Each partner** contributes capital or other assets to the partnership.

- The **partners** generally share management responsibilities and share the profits of the partnership in proportion to the relative **value of their contributions** to the firm.

- A partnership can be formed based on an **oral agreement**,

  but it is **highly desirable to have a written** agreement that states the rights, the responsibilities, and the obligations of each partner.

Alternative forms of business organization – General partnership

- ❑ A **partnership** pays **no taxes**, although it must **file** an **information tax return**.
- ❑ Profits are taxed at the **individual tax rate** of each partner.
- ❑ They typically are paid salaries and annually receive proportionate shares of the profits of the partnership.
- ❑ **Each partner** is an **agent** for the partnership and

  is able to enter into **binding contracts** in the **name of the partnership**,

  unless otherwise **stipulated** in the partnership agreement.

Alternative forms of business organization – General partnership

- ❑ **Each partner** assumes **unlimited personal liability** to third parties for any contracts and debts of the partnership,

  irrespective of the **value** of the partner’s **contribution** to the partnership.

Alternative forms of business organization – General partnership

- ❑ **Each partner** accepts unlimited financial responsibility for the **acts of the other partners** and
  - **underwrites the liabilities** of the partnership to the full extent of his or her **personal financial resources**.
    - ❖ This means that if any one partner is **unable to pay** his or her share of the partnership's liabilities,
      - creditors can **force the remaining partners** to pay the share of the first.

*Consequently, one should exercise **great care** in the **selection of partners** when organizing a partnership.*

Alternative forms of business organization – General partnership

- ❑ A partnership **continues** until the **death** or **withdrawal** of one of the partners.
- ❑ If each partner has **executed a buy/sell agreement** with the other partners, the **partnership may continue** following the death or withdrawal of a partner.
- ❑ These buy/sell agreements specify
  1. **How** the **value** of a partner's share of the business is to be **determined** and
  2. The **right** of the **remaining partners** to purchase the departing member's share.
- ❑ **Life insurance policies** are often used to provide the **financial resources needed** to **purchase** a **deceased partner's interest** according to the buy/sell agreement.
- ❑ The partnership may also be **dissolved** by **written agreement** among the partners, and individual partners may **sell their interests** in the partnership to the **remaining partners.**

Alternative forms of business organization – General partnership

❑ Advantages

1. Pooling of financial resources
2. Pooling of talent
3. Sharing of management responsibilities
4. Easier to attract capital than proprietorships

Alternative forms of business organization – General partnership

☐ Disadvantages

1. Unlimited liability of partners
2. Any partner can obligate partnership
3. Business may terminate on departure or death of partner

Alternative forms of business organization – Limited partnerships

- ☐ Because of the **unlimited liability** of the **partners**,

  a **new form** of partnership, known as a limited liability partnership, has been created.

- ☐ Such partnerships **limit** the partners' liability to the **assets** of the partnership.

Alternative forms of business organization – Limited partnerships

- Under the Uniform Limited Partnership Act,

  a limited partnership may be formed with **two categories** of partners,

  general partners and limited partners.

- A **general partner** contributes resources to the partnership and performs a management function,

  while a **limited partner** also contributes resources to the partnership,

  but has **no voice** in the management of the partnership.

- The **operation** of a limited partnership, as well as its establishment, must be in **accordance** with the **laws of the state** in which it is created.

Alternative forms of business organization – Limited partnerships

- ☐ The **primary purpose** for forming a limited partnership is to **raise capital without forming** a **corporation**.
- ☐ **Limited partners** are allowed to
  1. Invest in the partnership,
  2. Receive profits from the business, and
  3. Limit their liability to the amount of their investments.
- ☐ **Profits** are **distributed** to all partners and **taxed** at the individual tax rate of each partner.
- ☐ The **liability** of the limited partners is limited to their **investments in the partnership**.
  - ❖ The general partners, on the other hand, **bear unlimited liability** for any obligations of the partnership.

Alternative forms of business organization – Limited partnerships

- ☐ As with general partnerships,

  a limited partnership may **terminate** on the departure or the death of a general partner,

  unless buy/sell continuity agreements have been executed.

  - ❖ The limited partnership, however, is **not automatically terminated** upon the departure or the death of a limited partner.

Alternative forms of business organization – Limited partnerships

- ❑ Advantages
  - ❖ Pooling of financial resources
  - ❖ Pooling of talent
  - ❖ Sharing of management responsibilities
  - ❖ Limited liability of the limited partners
  - ❖ Easier to attract capital than general partnerships or proprietorships, because of the limited liability of limited partners

Alternative forms of business organization – Limited partnerships

- ❑ Disadvantages
  - ❖ Unlimited liability of general partners
  - ❖ Any general partner can obligate partnership
  - ❖ Business may terminate on departure or death of a general partner

Alternative forms of business organization – Corporations

- A corporation is a **legal entity** formed under state law by a certain number of **stockholders** filing a certificate of articles of incorporation with an **appropriate official of the state government**, and it operates under a **corporate name.**
- The corporation also **develops bylaws** to govern its **day-to-day business operations.**
- The state then grants a charter to the corporation allowing it to operate under the terms of its charter (articles of incorporation), its bylaws, and applicable state laws.
- The **formation** of a corporation brings into being a **legal entity** separate and distinct from the owners of the corporation.
  - It **owns all assets** and **owes all debts** of the company

Alternative forms of business organization – Corporations

- ☐ There are **two basic types** of corporations, privately held and publicly held.
- ☐ Some privately held corporations are **family-owned,** while others are **employee-owned.**
- ☐ An example of a family-owned corporation is **Bechtel**, and an example of an employee-owned corporation is **Kiewit**.
- ☐ **Publicly owned** corporations usually are listed on a **stock exchange** and owned by **individuals** who may or may not be associated with the company.
  - ❖ The **individual stockholders** generally have immunity from all corporate liability, which makes incorporation an attractive form of business enterprise

Alternative forms of business organization – Corporations

- ❑ Corporations enjoy the **right of perpetual succession** and are regarded by law as being **separate** and **distinct** from the **owners**.
- ❑ The **owners** of a corporation are known as **stockholders**, in that they own stock in proportion to **their investments** in the corporation.
- ❑ The profits of a corporation are subject to **income taxes** at the **corporate rate**.
- ❑ The **stockholders pay taxes** on any dividends provided by the corporation, which results in **double taxation** of those corporate profits that are distributed to the stockholders.

Alternative forms of business organization – Corporations

- ❑ The stockholders elect a **board of directors** to exercise general control over the corporation.
- ❑ The **board of directors** appoints the officers of the corporation, who **exercise day-to-day management** of the corporation, following the procedures described in the **corporation's bylaws**.
- ❑ **Senior managers** may or may not be elected members of the board of directors.

Alternative forms of business organization – Corporations

- ☐ A corporation is the **most expensive type** of organization to create and is subject to **more government regulation** than are partnerships or proprietorships.
- ☐ **Extensive record keeping** is required, which is subject to government review.

Alternative forms of business organization – Corporations

- ☐ Advantages
  - ❖ Limited liability of owners
  - ❖ Pooling of talent
  - ❖ Sharing of management responsibilities
  - ❖ Perpetual life of company
  - ❖ Easier to attract capital than partnerships or proprietorships, because investors need not be employed by the corporation

Alternative forms of business organization – Corporations

- ☐ Disadvantages
  - ❖ Closely regulated and state charter required
  - ❖ Most expensive business form to create
  - ❖ Extensive record keeping required
  - ❖ Double taxation of profits distributed as dividends

Alternative forms of business organization – Type S corporations

- ☐ Such corporations are **taxed as partnerships** rather than as corporations.
- ☐ The **number of stockholders** allowed is **limited to 75**,
  there must be only **one class of stock**, and
  all stockholders must consent to the company being treated as a type S corporation.
- ☐ Stockholders enjoy the corporate benefits of **limited liability** and the **ability to transfer ownership**, but there is no double taxation on dividends.
- ☐ Corporate profits are **taxed at the individual rate of each stockholder** instead of at the corporate rate.
- ☐ A **start-up company** could go in for a **type S corporation**, because company losses can be used to **offset shareholders' other taxable income.**

Alternative forms of business organization – Type S corporations

☐ **Advantages**

- Limited liability of owners
- Pooling of talent
- Sharing of management responsibilities
- Perpetual life of company
- Easier to attract capital than partnerships or proprietorships
- No double taxation of corporate profits

Alternative forms of business organization – Type S corporations

- ❑ **Disadvantages**
  - ❖ Closely regulated and state charter required
  - ❖ Most expensive business form to create
  - ❖ Extensive record keeping required
  - ❖ Limitation on number of stockholders and business volume

Alternative forms of business organization – Limited liability companies

- ☐ A **limited liability** company is a **legal entity**, similar to a corporation, which **combines**
  1. Limited personal liability with
  2. Pass-through tax benefits, similar to the type S corporation.
- ☐ Such companies are formed by **two or more people** filing written agreements with an **appropriate official** of the state government.
  - ❖ Such agreements must be prepared in **accordance** with **applicable state statutes**.
- ☐ A **limited liability** company is different from a limited partnership in that there are **no general partners.**

Alternative forms of business organization – Limited liability companies

- ❑ Also, it is **different from** a corporation because it has no stockholders or corporate officers.
- ❑ **Income generated** by a limited liability company is **taxed** in a manner **similar to a partnership.**
- ❑ The states impose **less regulatory** requirements on **limited liability companies** than they do on corporations.
- ❑ In **contrast** to a corporation,

  the limited liability company can be **dissolved** upon the **death** or **retirement of an owner**.

  - ❖ Some states allow the creation of limited liability partnerships for certain professions, such as **doctors** or **lawyers**, but **not construction companies**.

Alternative forms of business organization – Limited liability companies

❑ Advantages

- ❖ Limited liability of owners
- ❖ Pooling of talent
- ❖ Sharing of management responsibilities
- ❖ Easier to attract capital than partnerships or proprietorships
- ❖ Less regulated than a corporation disadvantages
- ❖ Regulated and state charter required
- ❖ More expensive business form to create than a partnership or proprietorship

Alternative forms of business organization – Limited liability companies

- ☐ Disadvantages
  - ❖ Regulated and state charter required
  - ❖ More expensive business form to create than a partnership or proprietorship

Alternative forms of business organization – Joint venture

- ☐ A joint venture is a **business alliance** between two or more business enterprises.

- ☐ The members of a joint venture may be
  1. Proprietorships,
  2. Partnerships, or
  3. Corporations.

Let’s see an example in the construction industry!

Alternative forms of business organization – Joint venture

- ☐ An example would be a joint venture between a design firm and a construction firm to perform a design-build project—such as Wasatch Constructors, formed by Kiewit Pacific, Granite Construction, and Washington Construction, to design and construct a major section of Interstate 15 in Utah prior to the 2002 Winter Olympics.
- ☐ Some joint ventures are **long-term relationships** that provide a melding of expertise to **compete in a particular market.**
- ☐ A joint venture can be a partnership or a corporation, but the most common is a **special-purpose partnership** that is organized to undertake a **single project**.
- ☐ These **special-purpose partnerships** typically are terminated upon the completion of the project.
- ☐ **Taxing** and **general liability** depend on the **type of structure** chosen for the joint venture.

Alternative forms of business organization – Joint venture

- ☐ The participants in the joint venture enter into a **written agreement** that
  - ❖ Defines the **objectives** of the organization and
  - ❖ Describes
    - ✓ The obligations and the rights of each party,
    - ✓ The percentage interest of each participant,
    - ✓ The amount of working capital to be contributed by each party,
    - ✓ The responsibilities and the procedures for managing the joint venture, and
    - ✓ The limitations on liability.

Alternative forms of business organization – Joint venture

- ☐ There is **no limitation** on the liability between the joint venture and the participants.

- ☐ If there is a **default by any member** of the joint venture,

  the **remaining members** are responsible for any contractual requirements.

- ☐ Crafting a good joint venture agreement requires skilled legal advice.

Alternative forms of business organization – Joint venture

❑ **Advantages**

- ❖ Pooling of financial and equipment resources
- ❖ Pooling of talent and expertise
- ❖ Sharing of management responsibilities
- ❖ Sharing of risk

Alternative forms of business organization – Joint venture

❑ **Disadvantages**

- ❖ Loss of control
- ❖ Sharing of profits

Alternative organizational structures

- **Once the type** of business organization has been selected for a construction firm, the **next decision** to be made is the organizational structure for the company.

Alternative organizational structures

- ❑ **Before selecting** an organizational structure, **company leaders** need to decide the following:
  - ❖ how the firm is to accomplish its mission,
  - ❖ the work processes to be used by employees, and
  - ❖ the authority relationships to be used to manage the company

Alternative organizational structures

- ❑ The **challenge** is to create a suitable organizational structure that provides an **adequate field structure**

  to manage the company's projects and a company administrative structure

  that serves in a **support capacity** for all company operations.

- ❑ The **more common types** of organizational structures are

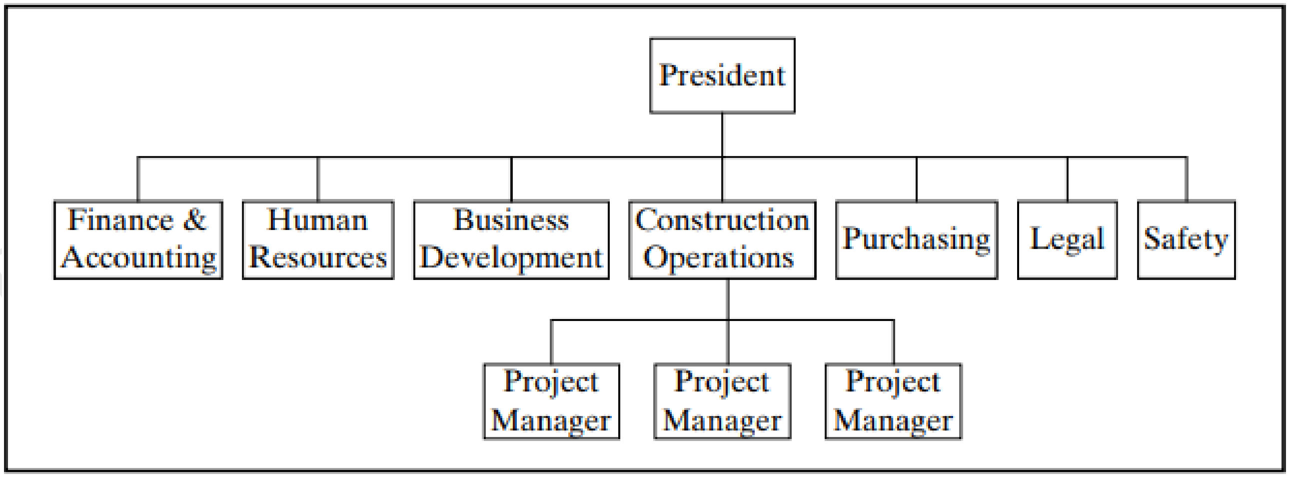
  1. Functional,
  2. Divisional, and
  3. Matrix.

- ❑ Each has its **advantages** and **disadvantages**, which should be considered in making a selection.

Alternative organizational structures – Functional

- ☐ The functional structure is the **most common type** of organizational structure used by most small and mid-size construction firms.
- ☐ It uses **organizational elements** that perform **specialized functional activities** such as

  construction operations or business development.



Alternative organizational structures – Functional

- ☐ The **basic characteristics** of a functional organization are
  - ❖ Organizational breakdown based on <u>function</u> or <u>process</u>.
  - ❖ **Line and staff functions**—
    - ✓ <u>Line functions</u> are those jobs that directly affect the principal work flow, and
    - ✓ <u>Staff functions</u> are those jobs that provide service or advice to line organizational elements.
  - ❖ **Chain of supervision**—
    - ✓ Authority and responsibility are arranged **hierarchically** with **only one supervisor** for <u>each position</u>.

Alternative organizational structures – Functional

❑ **Advantages**

- ❖ Promotes skill specialization
- ❖ Uses human resources efficiently
- ❖ Enhances specialized career development
- ❖ Facilitates vertical communication and centralized decision making

Alternative organizational structures – Functional

❑ **Disadvantages**

- Fosters parochial perspectives
- Inhibits cross-functional communication
- Obscures accountability
- Enhances potential for functional conflicts

Alternative organizational structures – Functional

- ☐ The functional organization structure encourages **limited perspectives** among employees

  focused on a **narrow set of functional** tasks

  rather than on the overall company strategic goals.

- ☐ Such an organizational structure may be **difficult to use** if the company serves multiple geographic areas or offers a variety of services.

- ☐ A **primary advantage** is its efficient utilization of people.

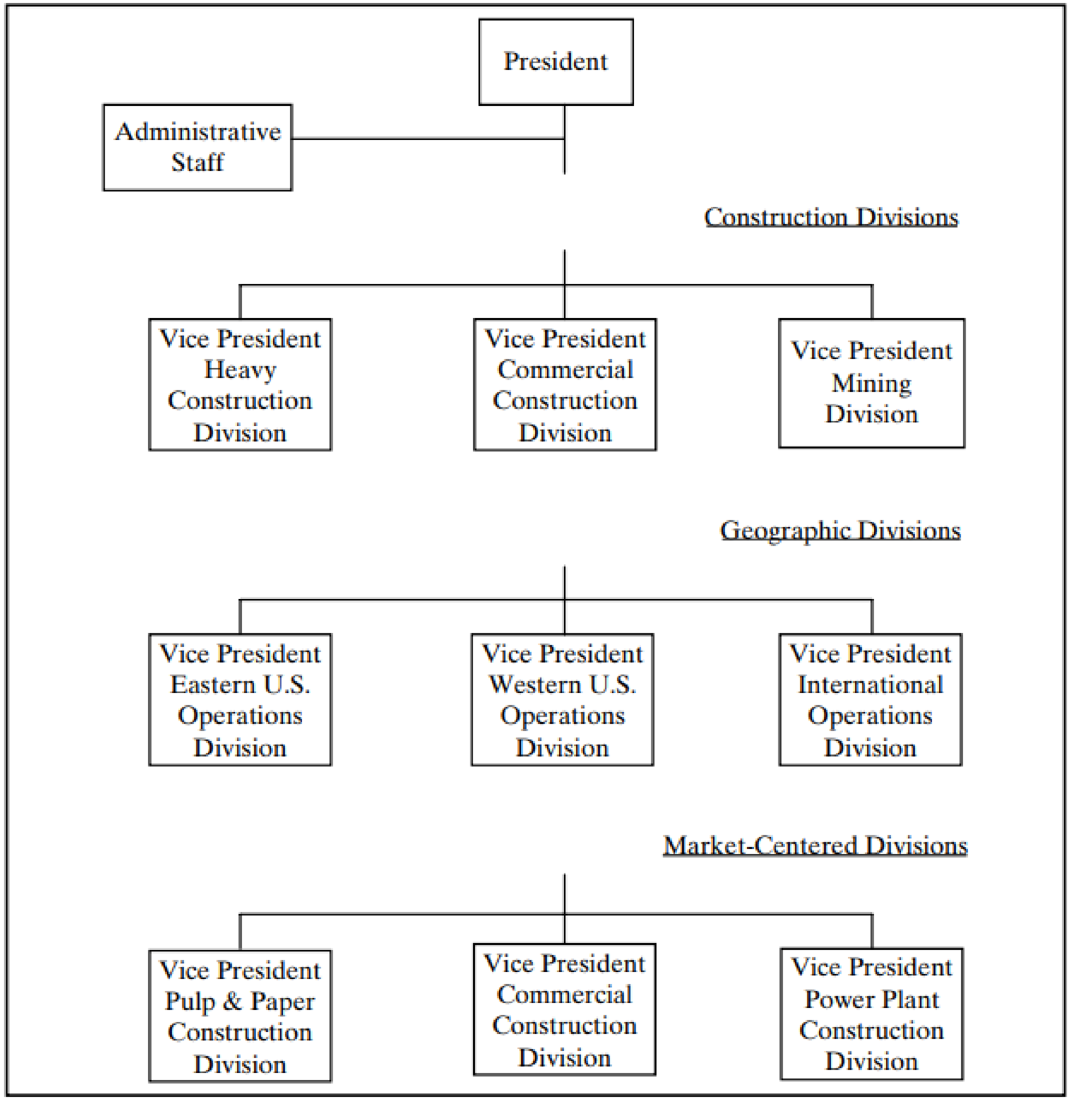
Alternative organizational structures – Divisional

- ☐ In this type of organization, there may be **multiple functional elements**, such as a construction operations section in **each division.**

- ☐ **Divisions** may be based on
  1. Geographical regions,
  2. Types of customers, or
  3. Categories of projects.

- ☐ This type of organization would be **used primarily** by **large construction firms** who operate in many locations or work across numerous segments of the market.

Alternative organizational structures – Divisional



President

Administrative Staff

Construction Divisions

- Vice President Heavy Construction Division
- Vice President Commercial Construction Division
- Vice President Mining Division

Geographic Divisions

- Vice President Eastern U.S. Operations Division
- Vice President Western U.S. Operations Division
- Vice President International Operations Division

Market-Centered Divisions

- Vice President Pulp & Paper Construction Division
- Vice President Commercial Construction Division
- Vice President Power Plant Construction Division

Alternative organizational structures – Divisional

- Divisional organizations **often start** as functional organizations but **evolve** as the number of markets or services increases.

- Most **national and international construction firms** use some type of a divisional structure.

Alternative organizational structures – Divisional

- ❑ **Advantages**
  - ❖ Focuses on products, customers, and markets
  - ❖ Recognizes interdepartmental interdependencies
  - ❖ Fosters cohesion
  - ❖ Ensures accountability
  - ❖ Allows diversification
  - ❖ Increases strategic and operational control
  - ❖ Minimizes problems due to sharing of resources across functional areas

Alternative organizational structures – Divisional

- ☐ **Disadvantages**
  - ❖ Uses resources inefficiently
  - ❖ Limits career advancement within functional areas
  - ❖ May lead to dysfunctional competition among divisions

Alternative organizational structures – Divisional

- ☐ The **divisional organizational structure** **reduces** the integration problem existing in the **functional structure**

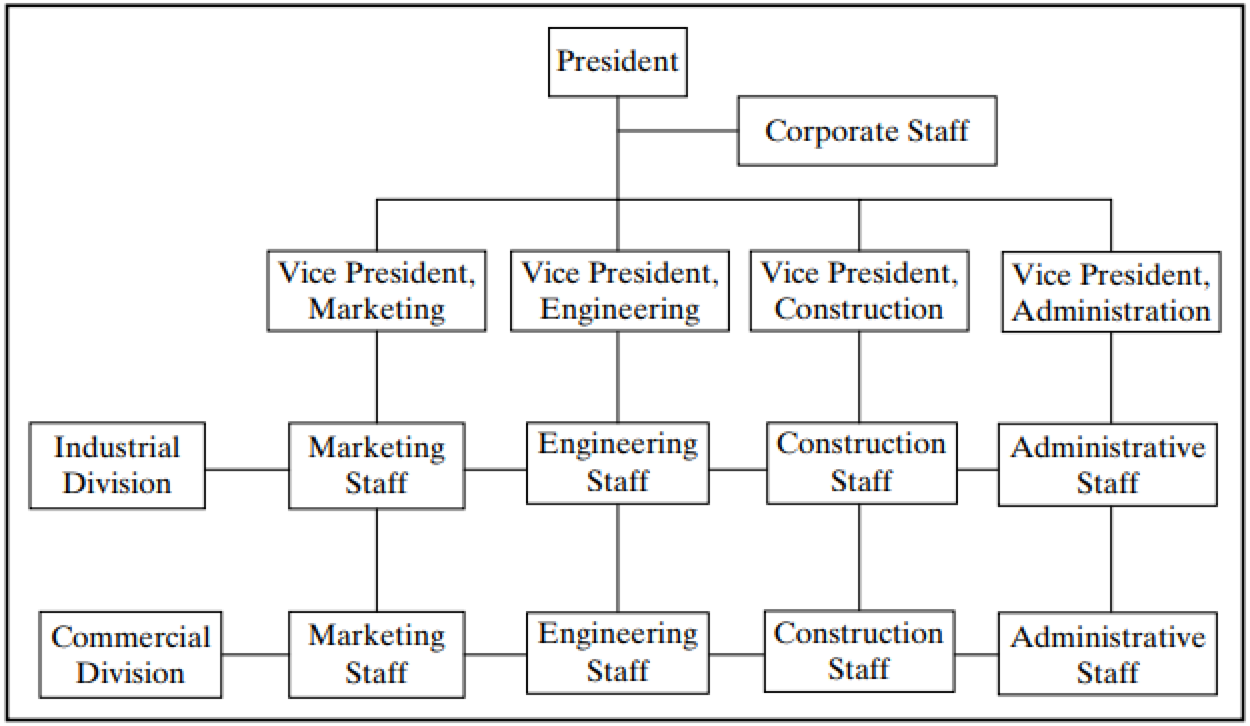
  by focusing self-contained organizational elements on **specific markets**.

- ☐ A **major leadership challenge** with divisional organizations is

  to **ensure** that information is shared among the various divisions.

Alternative organizational structures – Matrix

- ☐ This type of structure is used in **decentralized organizations** that **assign employees** to multifunctional teams while **retaining** functional chiefs.
- ☐ This is a **combination** of the functional and departmental structures and is the **most difficult** organizational structure to manage.



Alternative organizational structures – Matrix

- ❑ **Managers** of functional and service departments

  share the **supervision** of subordinates.

- ❑ The matrix structure **typically evolves**.

Alternative organizational structures – Matrix

- ☐ The **initial stage** is the **creation** of temporary task forces to handle particular issues or customers.
- ☐ The **second stage** is the **creation** of permanent teams.
- ☐ The **final stage** is when project managers are appointed and held accountable for integrating the teams’ activities.
- ☐ Matrix organizations are **not as common** in construction as are functional and divisional organizations.
- ☐ A matrix organization **may be created** to provide technical oversight of **individuals assigned** to various divisions.

Alternative organizational structures – Matrix

❑ Advantages

- ❖ Makes specialized knowledge available to all projects
- ❖ Uses resources flexibly to meet project requirements
- ❖ Forces communication among managers
- ❖ Can be adapted by shifting emphasis between functional and project orientation

Alternative organizational structures – Matrix

❑ **Disadvantages**

- ❖ Increases stress due to dual reporting relationships
- ❖ May lead to power struggles between functional and project managers

Matrix organizations generally require the committed managers and subordinates to be effective, because of ***dual supervisors*** *for many team members.*

Organizational design

- ❑ **Organizational design** is the **process of selecting**
  1. An organizational structure for the company and
  2. A formal system of communication, authority, and responsibility necessary to achieve the company's goals and objectives.

Organizational design

- ☐ A **good design** should
  - **Facilitate** the flow of information and decision making to manage **uncertainty** and achieve company **goals**.
  - **Define** the **authority** and **responsibility** assigned to organizational elements so that the **benefits** from the division of labor and effective job design can be realized.
  - **Create** the **desired degree** of integration among organizational elements.

Organizational design

- ❑ Major considerations in selecting an appropriate organizational design are
  - ❖ Work flow
  - ❖ Division of labor
  - ❖ Task interdependence
  - ❖ Hierarchy of authority
  - ❖ Business procedures and processes
  - ❖ Interdepartmental relations

Organizational design

- ☐ Is the company to use a functional, divisional, or matrix organization?

- ☐ Is it to be a **pyramid** or a **flat** organization,

  which relates to the span of control of leaders within the company?

  - ❖ Span of control means the **number of people supervised** by each manager.

- ☐ Are decisions made **centrally**, or is decision making **decentralized**?

Organizational design

- ☐ Companies with **centralized decision-making processes** tend to adopt smaller spans of control for company managers than do companies that adopt **decentralized** decision-making processes.

- ☐ A **centralized company** might select spans of control of **5 to 8 people**, while a **decentralized company** may adopt spans of control of **10 to 15 people**.

Organizational design

☐ Other factors that should be considered are

- Geographical area served by the firm
- Anticipated number of employees
- Type of products and services to be offered
- Type of customers to be served

Organizational design

- ☐ Once the **basic approach** to developing the **organizational structure** has been **selected**,

  the **next step** is to develop an **organizational chart** for the company.

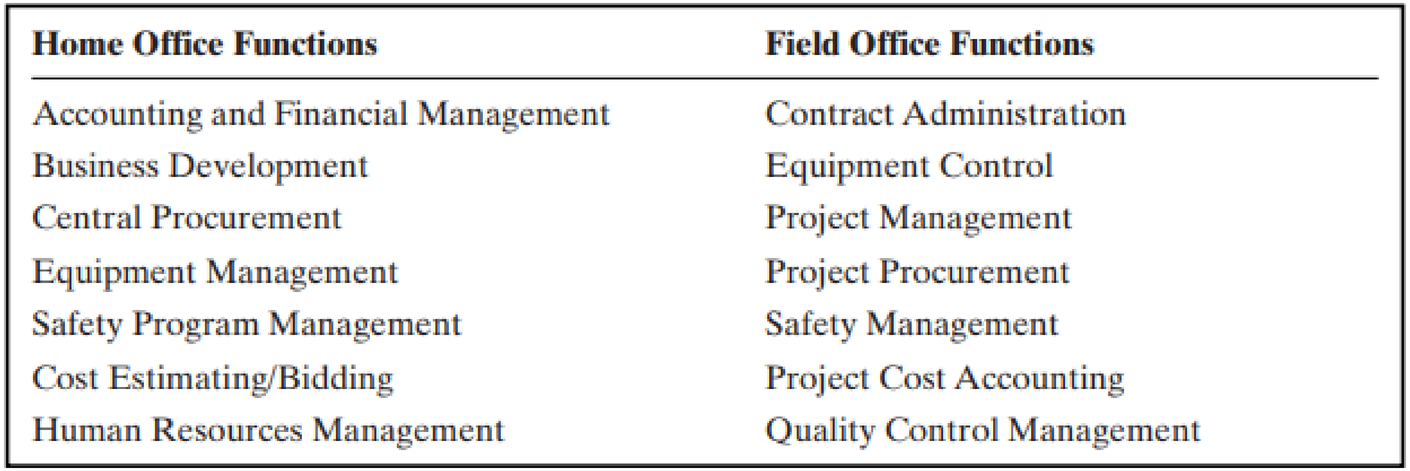
Organizational design

- This involves analyzing the way in which work is **performed within the firm** and answering the following questions:
  - Which tasks are performed at field offices, at regional offices, and at the home office?
  - A listing of home office and field office functions for a typical construction company.
  - Field office functions typically are those needed for direct management of construction projects, while those performed at a home office are those needed for management of the company.
  - Generally the number of functions performed in field offices is kept to a minimum to reduce project overhead costs.

Organizational design

- ❑ This involves analyzing the way in which work is **performed within the firm** and answering the following questions:
  - ❖ What is the anticipated workload in each functional area of each organizational element?
  - ❖ How many people are required in each organizational element to accomplish the anticipated workload efficiently?

Organizational design

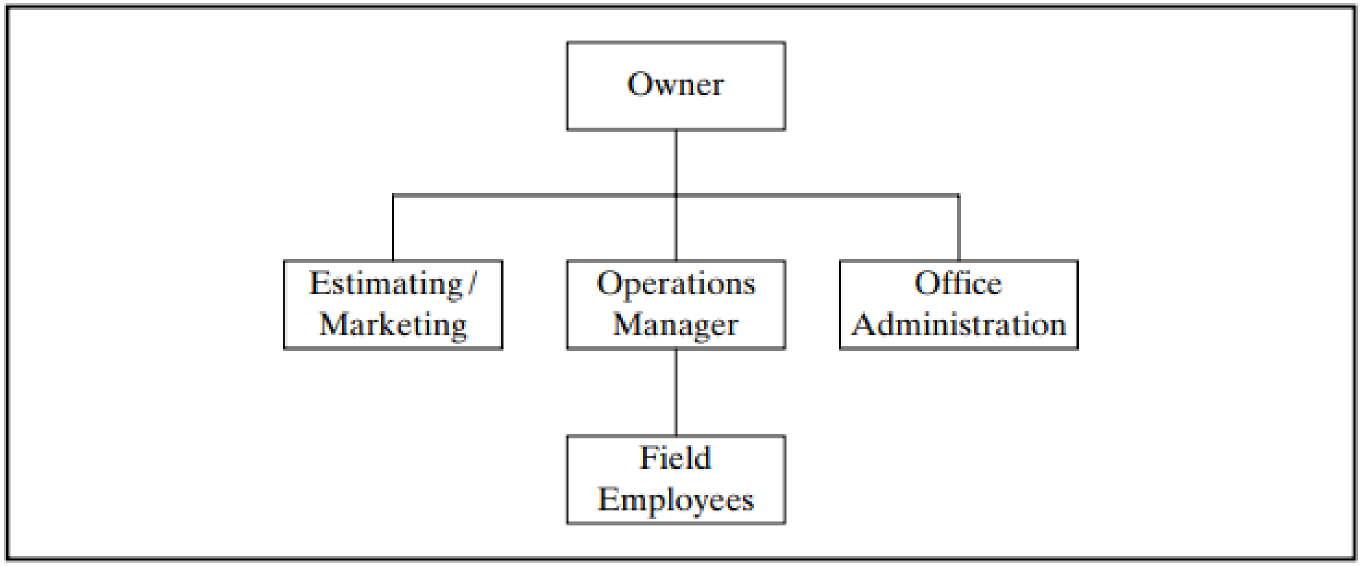


Home Office Functions	Field Office Functions
Accounting and Financial Management	Contract Administration
Business Development	Equipment Control
Central Procurement	Project Management
Equipment Management	Project Procurement
Safety Program Management	Safety Management
Cost Estimating/Bidding	Project Cost Accounting
Human Resources Management	Quality Control Management

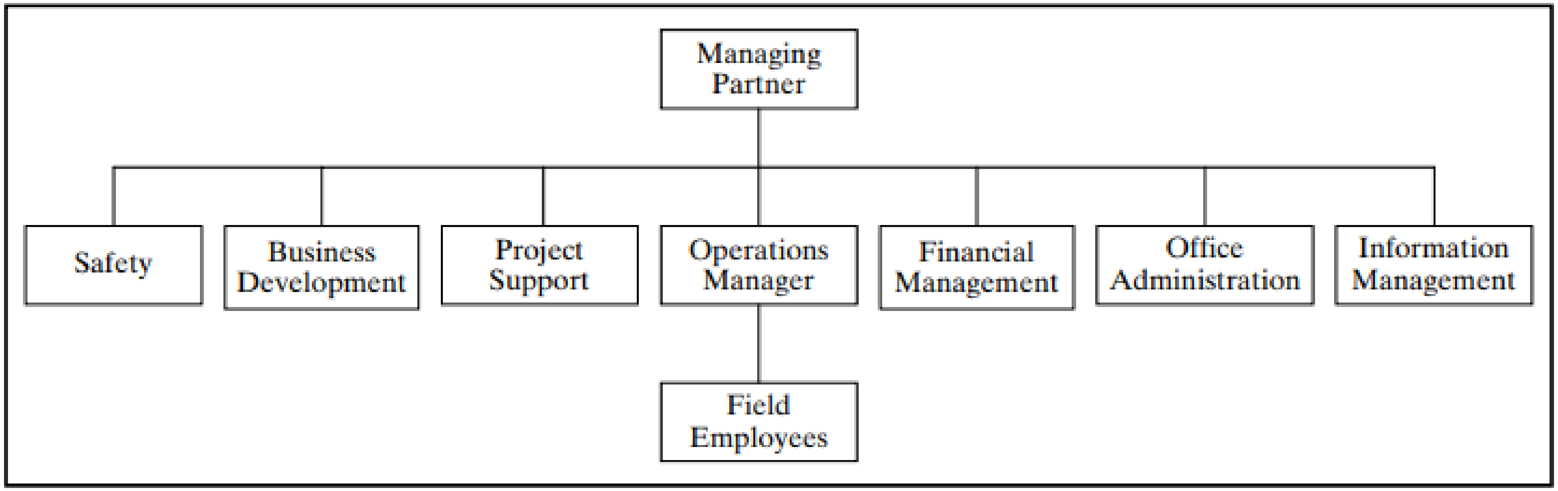
Organizational design

- ☐ An organization chart is a **pictorial representation** of the company's organizational structure that shows functional relationships as well as lines of supervision and authority.
- ☐ Most construction companies have an **operations activity**, which may include **field offices**, to manage the actual construction of projects.
- ☐ **All business functional activities** typically are grouped in a central office with needed project support services.
- ☐ The organization structure should be **designed** to accommodate growth, but **be flexible and adaptable**, as demand for construction services is often cyclical.
- ☐ The organization of the central office needs to be **efficient and economical**, to minimize the overhead cost of the company.

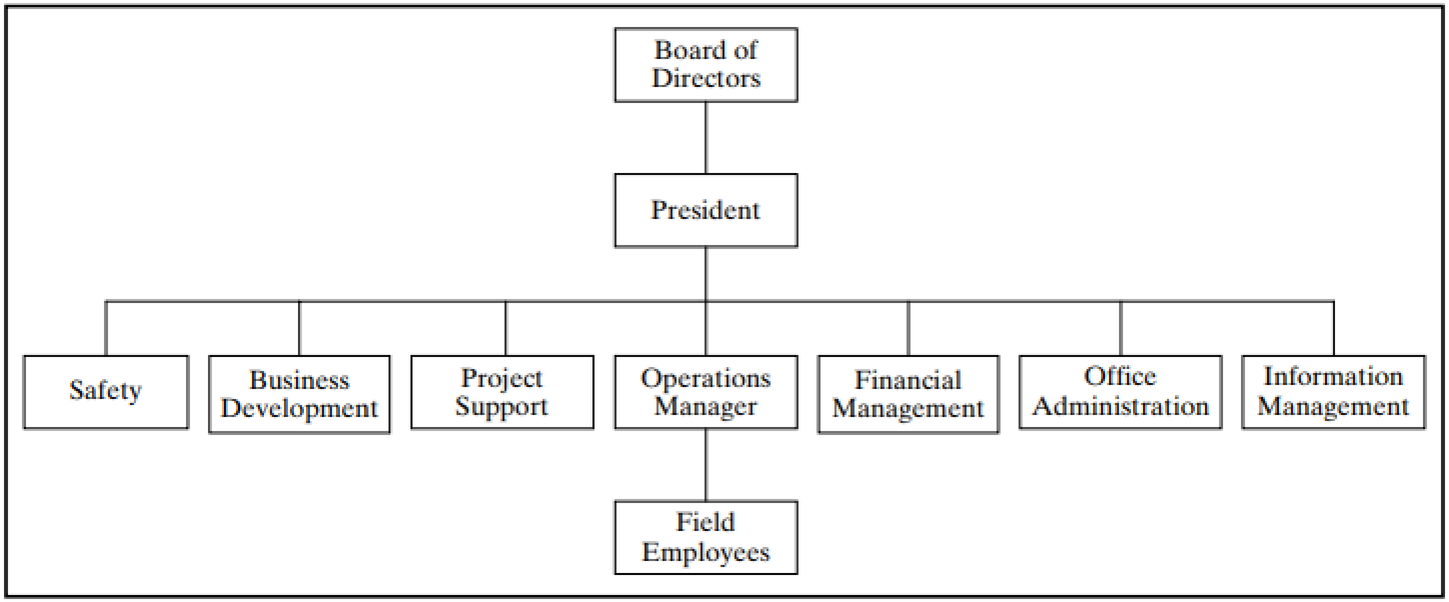
Organizational design



Organizational design



Organizational design



Organizational design

- **Once** the **organization chart** has been developed,
  1. The **number of people needed** for each function needs to be determined and
  2. **Job descriptions** prepared for each position.

Policies and operating procedures

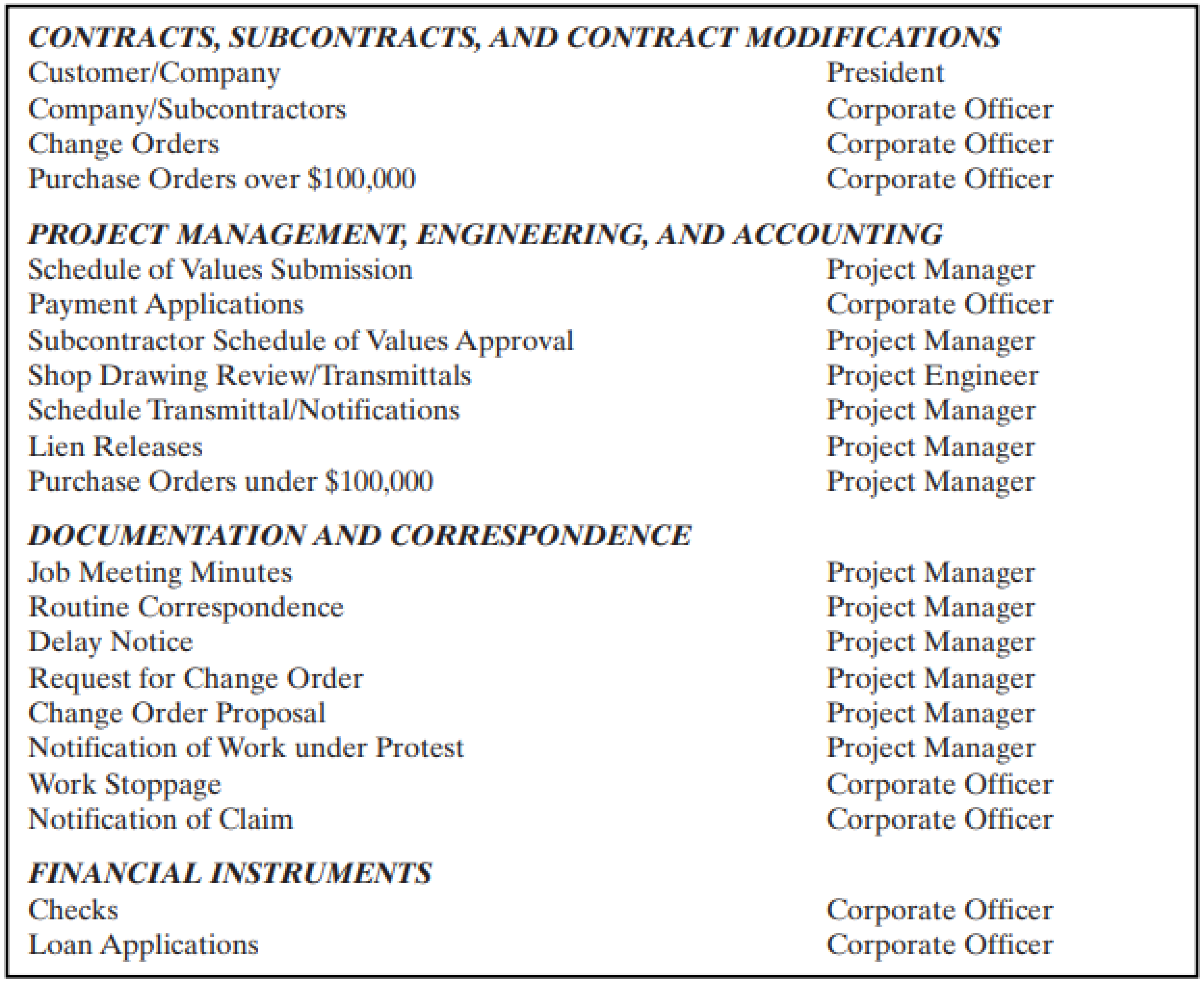
- ☐ **Once the organization structure** has been selected, the next issue to be addressed is development of written company policies and operating procedures.
- ☐ These policies and procedures provide
  1. **Guidelines for all levels** of company operations and
  2. **Guidance for decision making** in recurring situations.
  - ❖ **Operating procedures** establish general rules governing communications (written and electronic), the flow of paper, and other routine company operations.
    - ✓ The **primary purpose of the document** is to
      - ✓ Standardize operating procedures and
      - ✓ Decentralize decision making

        in routine events to **allow company leaders** to focus on **more critical issues**.

Policies and operating procedures

- ☐ The **manual** is often divided into sections, with each section addressing the policies and procedures related to the **individual functions** listed in next Figure.
- ☐ An **important section** is control of company overhead costs, including **annual budgeting** and **monthly management**.
- ☐ Such manuals usually also describe the composition and frequency of **various meetings** convened to address company **business management issues**.

Policies and operating procedures



CONTRACTS, SUBCONTRACTS, AND CONTRACT MODIFICATIONS	
Customer/Company	President
Company/Subcontractors	Corporate Officer
Change Orders	Corporate Officer
Purchase Orders over $100,000	Corporate Officer
PROJECT MANAGEMENT, ENGINEERING, AND ACCOUNTING	
Schedule of Values Submission	Project Manager
Payment Applications	Corporate Officer
Subcontractor Schedule of Values Approval	Project Manager
Shop Drawing Review/Transmittals	Project Engineer
Schedule Transmittal/Notifications	Project Manager
Lien Releases	Project Manager
Purchase Orders under $100,000	Project Manager
DOCUMENTATION AND CORRESPONDENCE	
Job Meeting Minutes	Project Manager
Routine Correspondence	Project Manager
Delay Notice	Project Manager
Request for Change Order	Project Manager
Change Order Proposal	Project Manager
Notification of Work under Protest	Project Manager
Work Stoppage	Corporate Officer
Notification of Claim	Corporate Officer
FINANCIAL INSTRUMENTS	
Checks	Corporate Officer
Loan Applications	Corporate Officer

Policies and operating procedures

- ❑ The policies and procedures manual should also
  1. Contain forms or electronic formats to be used,
  2. Assign responsibilities to individual organizational elements, and
  3. Assign signature authority for various documents.

- ❑ An example of a signature authority policy is **shown in previous Figure**.
- ❑ Such policies are established to indicate authority for **financially obligating** the company.
- ❑ Documents that have significant financial impact on the company are usually reserved for approval and signature by a **corporate officer** as part of the company’s **risk management policy.**

Policies and operating procedures

- ❑ The manual should also **describe**
  - ❖ All records that are to be retained and
  - ❖ How long they should be retained
  - ❖ All reports that are to be prepared,
  - ❖ The frequency for each report, and
  - ❖ To whom the reports are to be submitted.
- ❑ **Company leaders** need timely reporting of **key company performance data** to support their **decision-making processes**.

Homework

1. Develop an organization chart for a mid-size local construction company that provides both construction and construction management services to clients.
    - The number of employees is 80, and the annual volume of work is $50 million per year.
2. Prepare a table of contents for an operating procedures manual for the company discussed in Question 1.

Business Planning

Introduction

- **Long-term business planning** is essential to the continuing success **of a construction enterprise.**
- A business plan is typically presented in a **document that discusses** a <u>set of management decisions</u> that will result in the success of a firm.
- In its **most basic form**, business planning is the process of **deciding**
    1. **What** a firm will do to achieve success, and
    2. **How** it will do it.
- Internally, it can help improve performance by identifying both the <u>strengths</u> and <u>weaknesses</u> of the company's operation, and **potential** or **emerging problem areas**.

Practical business planning for contractors

- ☐ The process of planning may be defined as deciding in advance
    1. What is to be done,
    2. When it is to be done,
    3. How it is to be done, and
    4. Who is to do it.

Practical business planning for contractors

- ☐ Planning is **not making future decisions**.
  - ❖ Planning is concerned with **making current decisions** in light of the **anticipated future.**
    - ✓ It is **not what should be done** in the future,

      but rather what should be **done now** to achieve outcomes in the **uncertain future.**

Practical business planning for contractors

- A **great selling point** for comprehensive corporate planning is the **ability of the contractor** to simulate the future, on paper.
- If the **simulation doesn't work out**, the exercise can be erased and started again.

Practical business planning for contractors

- ☐ While **no one can predict** the future 100%, the probability of certain events having a **predictable cause and effect** relationship is pretty good.

- ☐ The **more we know** about our business, our market, and our competition,

  the **more likely** we are to simulate the outcome of our moves with **increased accuracy**.

- ☐ In addition, the **more we plan**,

  the **better planners we become**.

A sample business plan

- ☐ A **planning group** is essential to outline and drive an organization’s business plan forward.
- ☐ In **most organizations** the planning group will be the key personnel who run the organization **every day.**
- ☐ The **size** of the planning group generally **varies** by the size of the organization, but the **ideal group size** is between 3 to 12 key people.
  - ❖ Groups including **more than 12 members** can be difficult to manage.

A sample business plan

- ☐ In a smaller company, **three or four key people** may be enough for forming the planning group.
- ☐ In a larger company, **all department and/or division heads** may be reasonable candidates.
- ☐ The ideal planning group has **representation from each functional area** of the company (i.e., one person from accounting, one from estimating, sales, etc.).

A sample business plan

- ☐ The **qualifications** for group members include being strategic and forward-thinking individuals.
  - ❖ Some people are **great in considering** the **here and now and even the near-term** future

    but have **limited ability** to conceptualize the long-term future.

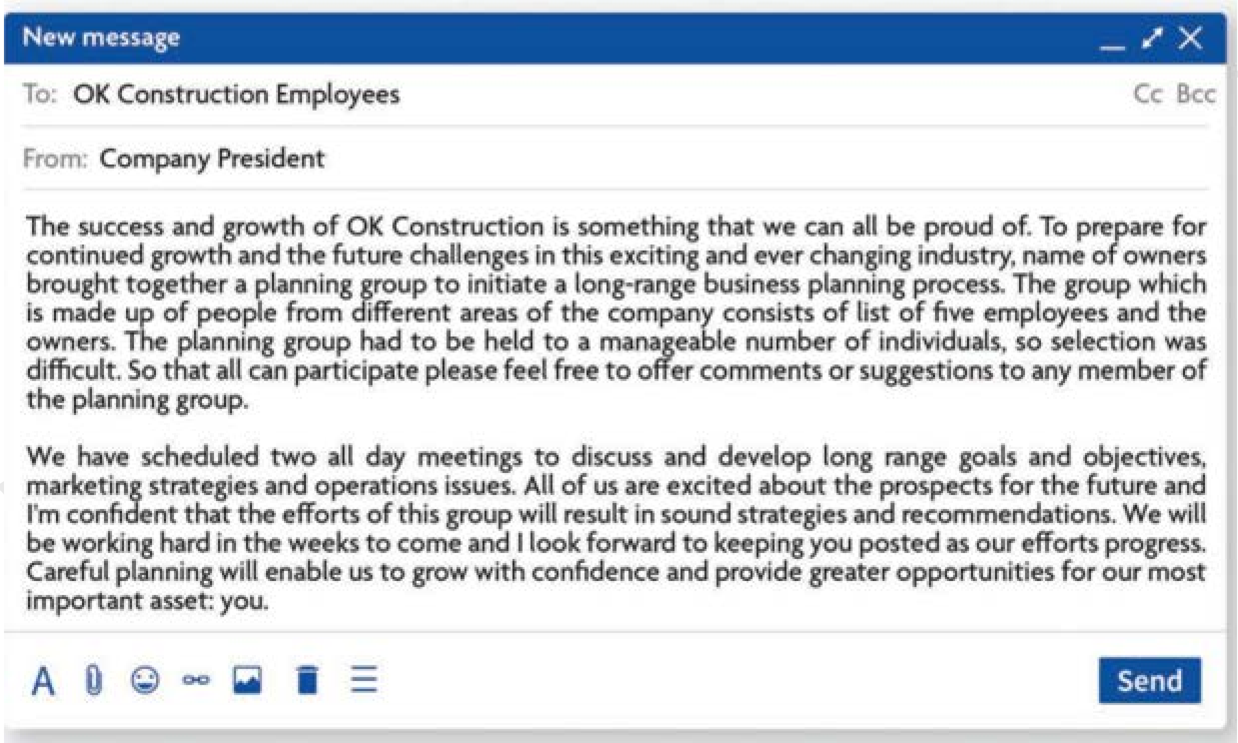
A sample business plan

- ❑ The **quality of the plan** is directly proportional to the **qualifications** of the planning group members, and so **hard choices** may need to be made.
  - ❖ **Compromising** by adding **“deserving” less-qualified** people does not work and will **diminish the quality** of discussions, deliberations, and decisions.

- ❑ The planning process should be **transparent**, so it is appropriate to keep all permanent **employees advised of the pending process**.

A sample business plan

- A memo to employees, introducing the planning process, should help explain to those not selected how the process will work.
- Sample announcement memo



To: OK Construction Employees

From: Company President

The success and growth of OK Construction is something that we can all be proud of. To prepare for continued growth and the future challenges in this exciting and ever changing industry, name of owners brought together a planning group to initiate a long-range business planning process. The group which is made up of people from different areas of the company consists of list of five employees and the owners. The planning group had to be held to a manageable number of individuals, so selection was difficult. So that all can participate please feel free to offer comments or suggestions to any member of the planning group.

We have scheduled two all day meetings to discuss and develop long range goals and objectives, marketing strategies and operations issues. All of us are excited about the prospects for the future and I'm confident that the efforts of this group will result in sound strategies and recommendations. We will be working hard in the weeks to come and I look forward to keeping you posted as our efforts progress. Careful planning will enable us to grow with confidence and provide greater opportunities for our most important asset: you.

A sample business plan

- ❑ **Company owners** and **non-owners** are treated as **equal participants** during the planning sessions.
  - ❖ However, in some cases, **personality conflicts** inhibit smooth planning sessions, and some organizations do better with a **facilitator** to enable the planning process and write up the results.
- ❑ It must also be noted that **facilitators** should carefully **limit** their **own input** in the planning process to **avoid influencing outcomes**.
- ❑ A **minimum of one key field personnel** is imperative in the planning group;
  - ❖ however, it may be best to **include additional field representatives** to ensure that the planning group is **not too office-centered**.

A sample business plan

- ☐ It is imperative that **planning sessions** be held **away from the office** for several reasons.

- ☐ It can be **uncomfortable for employees** at the **bottom of the reporting chain** to speak their mind to those of a **senior rank**,

  but their input usually has huge value as they often **know more about what is going on** in the rank and file than top management.

- ☐ There are often **"strong willed" in top management** to the extent that in some cases a **facilitator will be of great assistance** in getting the best out of everyone.

A sample business plan

- ☐ For a <u>small or midsize</u> construction enterprise, a **three-year plan** is appropriate because it is difficult to **see forecasts much farther** out than that.
  - ❖ Planning **year one** can be **reasonably accurate** because backlog and available **market** are **fairly clear.**
  - ❖ The **second year** is <u>harder</u>, and

    by **three years** out market projections are **primarily guesswork**.
- ☐ We recommend a <u>three-year plan</u> for **small** and **midsize** companies, and

  either three- or <u>five-year plans</u> for **larger firms**.

A sample business plan

- ☐ In both the three-year and five-year plans the **first year is “hard” (detailed)** and the **next are “soft” (less detailed).**
  - ❖ However, for **goal-setting** we recommend starting with **third-year goals** because the **first year is too close** to “dream big.”
- ☐ For organizations that own a **lot of heavy equipment** with a useful life longer than five years,

  we recommend a **three-year plan with an attachment of a five-year** (or longer) equipment plan.
  - ❖ This tends to **highlight for planners** that when purchasing equipment that lasts five or seven years,

    there is **little knowledge available** about the **market the equipment** is to be working in **after three years.**

A sample business plan

- ☐ The **planning process begins** with available resources and progresses through the **three functional areas** of the construction business:
  1. Getting the work,
  2. Doing the work, and
  3. Accounting for the work.
- ☐ The owners’ and planners’ goals and objectives should be **clarified first** (more about this later).

A sample business plan

- Then a **realistic projection** of the company’s **market over the years**,

  the **business plan** will cover and the **development of a marketing plan** on how the work will be captured.

- An **organization** or **operation plan is next**,

  which **simply describes** how the company will be (or already is) organized and

  structured to carry on the work of the enterprise and how that will be accomplished.

A sample business plan

- ❑ The **financial plan** is actually one of the **softer (less detailed) portions** of the overall plan as it **translates into numbers** that the planners hope to accomplish,
  - which often **consist of ranges**, and
    - as such **numerical results cannot** be predicted with **great accuracy**.
- ❑ In some cases, the **financial plan may translate** the rest of the plan in a negative light,
  - meaning that the results of the other plans will **not produce a satisfactory** picture.
  - ❖ **New equipment** may have been scheduled to be purchased in the operations plan
    - that creates an **unsatisfactory debt ratio** in the financial plan, or
      - sales may be **planned for in subsequent years** that require bonding capacity that the pro **forma statement will not support.**

A sample business plan – Case study

- A business plan for a **hypothetical construction company** called OK Construction is discussed.
- In this example scenario, the **owners of OK Construction decided** to initiate formal **long-range planning** as a method of managing their business.
  1. Owner 1 is president of the company and its chief executive officer.
  2. Owner 2 is responsible for marketing and equipment management.
  3. Owner 3 is in the process of assuming greater responsibilities for construction operations and will be responsible for field operations in three years.

A sample business plan – Case study

- ☐ First, a **selection of key individuals** representing **all functional areas** of the company established the planning group and began the planning process.
- ☐ A **three-year plan** was developed, including a **first-year plan in greater detail.**
- ☐ The **plan covered** marketing, organization, production, and finance, with short-term and long-term goals and objectives established in each area.
- ☐ To accomplish the goals and objectives, the group formulated strategies and scheduled specific actions.
- ☐ The planning group **met quarterly** to monitor progress and **adjust** the strategies to current situations.

A sample business plan – Case study

- ❑ **After one year,**

  a **new three-year plan** is developed by the same planning group;

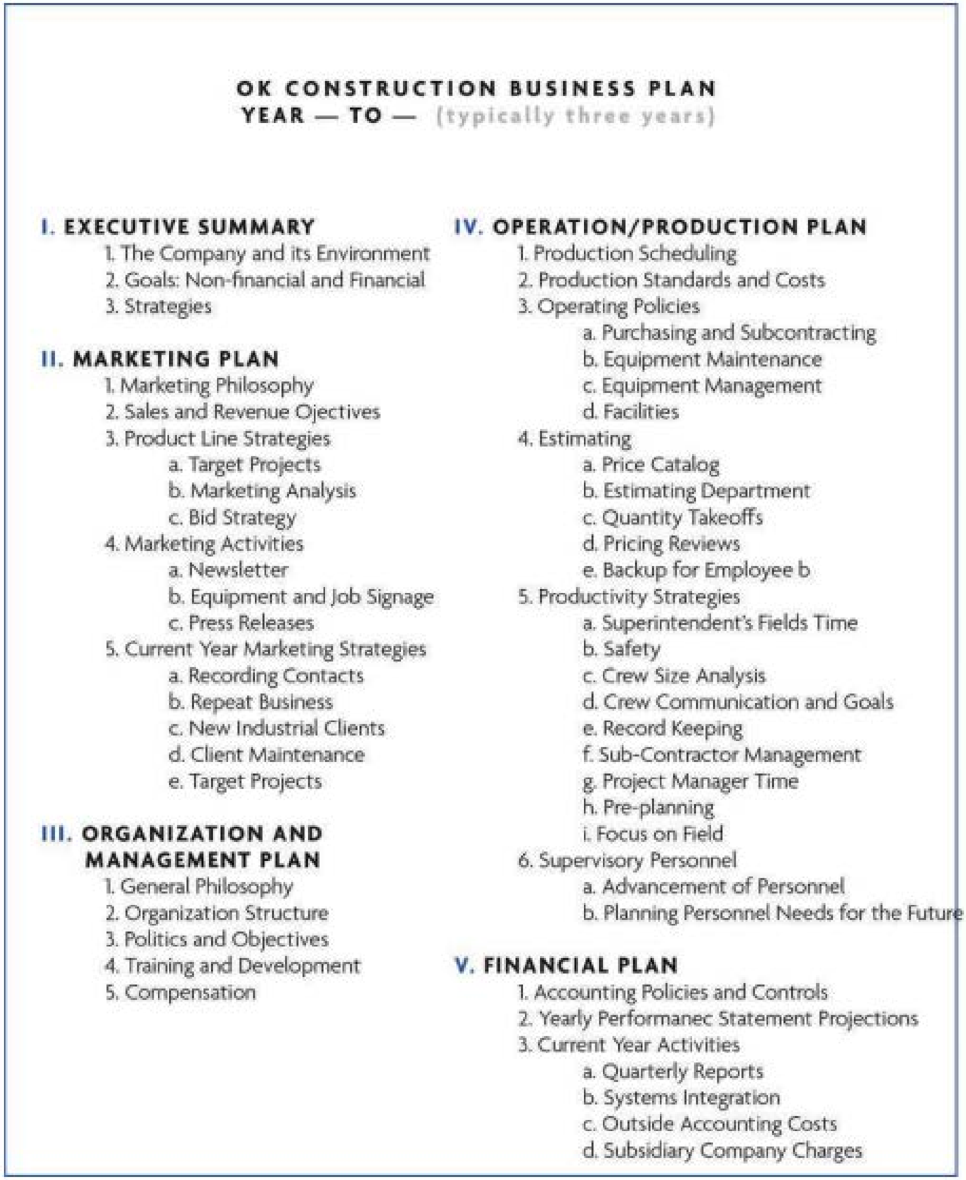
  again one year in detail and two years with **less detail.**

- ❑ The exercise is **repeated every year**, looking three years in the future.

- ❑ Several activities or objectives planned in the original schedule, but **not accomplished from the previous year,**

  were **restated for action the coming year** and new objectives and strategies were added.

A sample business plan – Case study



OK CONSTRUCTION BUSINESS PLAN
YEAR — TO — (typically three years)

I. EXECUTIVE SUMMARY
1. The Company and its Environment
2. Goals: Non-financial and Financial
3. Strategies

II. MARKETING PLAN
1. Marketing Philosophy
2. Sales and Revenue Ojectives
3. Product Line Strategies
    a. Target Projects
    b. Marketing Analysis
    c. Bid Strategy
4. Marketing Activities
    a. Newsletter
    b. Equipment and Job Signage
    c. Press Releases
5. Current Year Marketing Strategies
    a. Recording Contacts
    b. Repeat Business
    c. New Industrial Clients
    d. Client Maintenance
    e. Target Projects

III. ORGANIZATION AND MANAGEMENT PLAN
1. General Philosophy
2. Organization Structure
3. Politics and Objectives
4. Training and Development
5. Compensation

IV. OPERATION/PRODUCTION PLAN
1. Production Scheduling
2. Production Standards and Costs
3. Operating Policies
    a. Purchasing and Subcontracting
    b. Equipment Maintenance
    c. Equipment Management
    d. Facilities
4. Estimating
    a. Price Catalog
    b. Estimating Department
    c. Quantity Takeoffs
    d. Pricing Reviews
    e. Backup for Employee b
5. Productivity Strategies
    a. Superintendent's Fields Time
    b. Safety
    c. Crew Size Analysis
    d. Crew Communication and Goals
    e. Record Keeping
    f. Sub-Contractor Management
    g. Project Manager Time
    h. Pre-planning
    i. Focus on Field
6. Supervisory Personnel
    a. Advancement of Personnel
    b. Planning Personnel Needs for the Future

V. FINANCIAL PLAN
1. Accounting Policies and Controls
2. Yearly Performanec Statement Projections
3. Current Year Activities
    a. Quarterly Reports
    b. Systems Integration
    c. Outside Accounting Costs
    d. Subsidiary Company Charges

A sample business plan

- ❑ **See A Sample Business Plan**

Exercises

1. Discuss the common reason for not planning.
2. Discuss the qualification and process of selecting planning group members.
3. Explain how you would go about determining the appropriate length of a business plan.
4. How many members would you prefer on a business planning group and why.

موسسه مهندسی و مدیریت ساخت علوی پور (ACEMI)

دفتر آموزش
تهران، بلوار فردوس شرق، مجتمع آبگینه، طبقه سوم اداری، واحد C42

☎ +۹۸ ۲۱ ۴۶ ۱۰۰ ۴۵۰
☎ +۹۸ ۲۱ ۴۶ ۱۰۰ ۴۴۵

---

www.dralavipour.com
info@dralavipour.com
@acemi_social
@alavipour_pm
@IRANACEMI
@alavipour_pm