Impacted Jobsite Productivity

Learning the Causes | Learning to Fight Back

By: David Brown
About The Profit Happens Here… Series

The Profit Happens Here… series is the result of codifying the experiences of our senior consultants into modules that can help our clients grow, change and train their teams more effectively. These modules are delivered in a variety of formats including books, training classes, one-on-one coaching, speaking topics, etc.

We are constantly adding new modules and enhancing existing ones based on feedback, client projects, changing industry conditions and input from new team members. Current modules include:

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About D. Brown Management

Headquartered in Northern California, D. Brown Management provides a comprehensive scope of general management solutions to construction clients nationwide, including strategy, planning, operations, field productivity, workflow, financial management, technology, and marketing. With D. Brown Management, organizations can improve processes, productivity, and ultimately profitability.

Working with us is like having a very well-rounded, hands-on General Manager working closely with you to solve a variety of business problems on an as-needed basis.

About The Author

DAVID BROWN is the Founder and President of D. Brown Management. Beginning his construction career in 1988 as an electrician, Dave quickly worked his way up the ranks to foreman, superintendent, and project manager before moving to executive management. In addition to managing client projects nationwide he frequently speaks to groups such as CFMA, Electric West, the Engineering & Utility Contractors Association (EUCA), and the Western Electrical Contractors Association (WECA) about how to increase profitability. Recent speaking engagements have addressed integrating accounting and operations, production tracking, change order management, construction technology, and cash flow.

CONSTRUCTION EXPERIENCE: Includes commercial, residential, industrial, underground construction, airports, telecommunications and traffic operations systems for private, public, federal and military owners.
Intro – Impacted Jobsite Productivity

Maintaining a high-level of jobsite production is one of the most important activities for any foreman, superintendent, or project manager.

When production rates drop, a project can lose money. Without the proper documentation these losses cannot be recovered.

Worse yet, if production rates are left at a lower level, and a company adjusts their estimating to match their production rates, the company will become uncompetitive in the marketplace.

The upside – if production rates are monitored closely, and improved upon constantly, then the company will gain a competitive advantage in the market and any impacts will be seen immediately, when they can be dealt with.

Many factors affecting productivity are well within our control. Many more factors are generally out of our control.

We are going to explore what productivity is, how it is measured, and the key factors affecting productivity on a jobsite.
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What is Productivity?

Quite simply, productivity is a measure of how much of something is produced for a given amount of resources.

Productivity is related to job costing, but is typically more detailed in that it captures both the quantity of installation AND costs.

Job costing systems typically capture costs at such a “big picture” level that it is impossible to get accurate production numbers out of them.

Job costing systems also typically run a minimum of one week behind, so by the time you could get any useful productivity information out of them, it is likely too late.

How Productivity is Measured

Productivity is expressed as a ratio between units produced or installed and resources used.

A very simple calculation example is a trenching operation where production could be expressed in feet per day. Typically one of the numbers, either resources or units, is set to “1,” and that is typically expressed as the second part of the equation, as in the different examples below:

- 310 Feet Per Day
- $4.62 Per Foot
- 32 Fixtures Per Day
- 0.25 Hours Per Fixture
- $12.76 Per Fixture
The table below shows some typical Units and Resources used in productivity measurements:

<table>
<thead>
<tr>
<th>PRODUCTION UNITS</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Each</td>
<td>□ Schedule – Weeks, Days, Hours</td>
</tr>
<tr>
<td>□ Linear Feet</td>
<td>□ Manpower – Hours, Crew Day</td>
</tr>
<tr>
<td>□ Square Feet</td>
<td>□ Equipment – Weeks, Days, Hrs.</td>
</tr>
<tr>
<td>□ Cubic Feet</td>
<td>□ Cost – Total, Variable</td>
</tr>
<tr>
<td>□ Cubic Yards</td>
<td></td>
</tr>
<tr>
<td>□ Tons</td>
<td></td>
</tr>
</tbody>
</table>

These are covered in more detail in the “Production Tracking” module of the management class series. See [www.dbrownmanagement.com](http://www.dbrownmanagement.com) for more information.

**Production Rates at Extreme Detail**

A great example of production rates are the labor units used in the bidding of construction projects. These rates have been determined through very detailed cost accounting on a variety of construction projects. There are several companies that assemble this type of cost data. Some are industry specific such as NECA ([www.necanet.org](http://www.necanet.org)), while others hit the broach construction market such as RS Means ([www.rsmeans.com](http://www.rsmeans.com)).

While this level of detail is required for accurate bidding, it is impractical to track job costs or production in the field at this level of detail.
Measuring Production in the Real World

You have to find a balance between the labor units used for estimating, which are too detailed, and the job costing system, which is too broad and provides information that is too late.

A realistic production measurement timeframe needs to be on a daily basis, at a maximum, in order to provide actionable feedback. These should also be summarized by the week to even-out high-production and low-production days, as well as taking into account days when setup and pre-fabrication is done to support higher production over the following days.

Production Rates are Relative

What is good production?

Production rates are relative – they mean nothing if they are not compared to something else. The typical comparisons are:

- **Estimated**: If your production rate exceeds the rates you estimated the project by, you are making money. If not, then you are losing money. It is critical to know this on a daily basis so you can make corrections. If you are unable to attain the estimated productivity rates, then the feedback needs to get back to the estimators so they...
can adjust the production rates they estimate jobs at. Overestimating productivity on a bid CANNOT be made up for with more volume!

- **Past Production:** Comparing your current production rates to your past production rates on the same or other projects is the best way to determine if you are being impacted or if the new installation method is working. It is also the best way to establish and prove a “measured mile” as described below.

- **Industry Standards:** This information is hard to attain, but with a little work you can gain a lot of information and set benchmarks for your production. The importance of comparing your production with the rest of the industry is that if you can exceed that production, you will gain a competitive advantage, which equals more work, more profits, and more opportunity for everyone. The opposite is also true.

One other area where you can compare production rates is between crews and even crew members. This will clearly show the wide variation between a top producer, an average producer, and a bottom producer. You can use this information to help share ideas about production, and in turn, raise the overall average. Having this data widely available takes care of a lot of people management problems because it makes it obvious where people actually rank.

**Understanding a “Measured Mile”**

The “measured mile” is a term used in preparing productivity impact claims, and is essentially a way to state that, for a specific period of time, when the work was un-impacted the cost was X, and then during an impacted period of time the cost was Y; therefore, the cost of the impact is Y minus X.

<table>
<thead>
<tr>
<th>MILE 1 – BASELINE</th>
<th>MILE 2 (IMPACTED)</th>
<th>MILE 3 (SEVERELY IMPACTED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20,000</td>
<td>$26,000</td>
<td>$32,000</td>
</tr>
</tbody>
</table>

This is why it is important to be able to tie productivity rates out to a job journal or other log of impacts. Just saying that a certain impact occurred during a specific period of time is absolutely useless unless you can put a hard dollar amount to that impact.

The only effective way to do this is through establishment of a “measured mile.” We will dive deeper into this during the module on Production Tracking. See [www.dbrownmanagement.com](http://www.dbrownmanagement.com) for more information.
Activity: Key Production Activities

Every project will have three to five major activities that make up over 70% of the total production on the project. If you manage the production on these activities properly, then all other phases of the project will come together. For the types of projects you do, make a list of these top activities.
Four Pillars of Productivity

Getting productivity out of a crew breaks down to four key areas. How well you execute these will determine the productivity of your crew. The systems you set up in your company to guarantee these four areas are managed effectively will determine the success of your company.

1. **Materials:** This is priority number one, but is also relatively easy to manage and set up systems for. If the crews do not have materials, they cannot install anything. Making sure all materials are on the jobsite AND that they are getting to the work areas for the crews to install in an efficient manner.

2. **Tools and Equipment:** Simple enough. No tools = no production. Make sure that the crews have all the tools they need and that they are readily accessible. Also be constantly looking at higher production equipment or tools. Do a quick analysis to see if the higher cost of the tool will offset the savings in labor.

3. **Information:** If people have materials and tools, then the only thing they need to get started with installation is the information about what, where, and how they will be doing the installation. This is the area where pre-planning comes in. You will NEVER be able to achieve 100% in this area – which is why you need to be constantly working on improving what information you have, and how you communicate it to the crews.

4. **Goals:** Adding in goals can improve production by 10% or more on a regular basis. We are all motivated by having goals to work towards. Don’t underestimate the power of setting goals for the crew on a daily and weekly basis. Look at tying small rewards to meeting certain production goals throughout the entire work process. If an activity is budgeted to take a crew three days, offer them all a steak dinner if they finish in two. You will be amazed at how many times they will earn the steak dinner.

Good jobsite productivity is that simple – don’t make it any more complicated. EVERY project management process in your company, EVERY activity that you do every day should be able to be categorized into one of these four pillars. If they aren’t, you need to ask yourself whether it is really necessary.

*Remember that good productivity means a competitive advantage, more work, good profitability, and more opportunities for everyone in the company.*
Outside Factors Affecting Productivity

There are many factors that affect your productivity that are not within your control. It is important to have an understanding of these factors in order to be able to quantify the costs, fight them, and mitigate them.

- Owner furnished items (material and equipment)
- Schedule unleveled (over Manning and overtime)
- Changes to work
- Unclear contract documents
- Learning curves for additional crew members
- Stacking of trades (too many bodies!)
- Schedule compression
- Extended overhead (schedule extension)
- Beneficial occupancy
- Excessive re-mobilizations

In the following sections, we will dig deeper into each of these along with a quick discussion of how to quantify costs and mitigate the problem.

Owner Furnished Items

When you have a contract in which your customer is furnishing materials or equipment, you give up two things.

1. The profit associated with the mark-up on that material or equipment.
2. Control over the logistics of that material or equipment.

This takes away some of your control over one of the key pillars of productivity.
If you are managing on a project that has owner furnished items, you need to plan for extra time required to make sure your crews get the information they need about the equipment, and that logistics are handled in a way that enables your crews to be as efficient as possible.

Owner furnished items are not always bad. A lot depends on how well the process is managed. In order to fight productivity losses, you need to create a plan for the material logistics as if you were responsible, and then work with the customer to make sure your requirements for productivity are understood.

At this point, you should also spend some time “educating” the customer on how much it will cost you if certain logistical criteria are not met, i.e. late deliveries, material not staged in the proper areas, etc.

This is a fine balancing act, because you don’t want to damage the relationship at this point by predicting that the customer won’t be able to manage the process. At the same time, you need to get it “on-the-record,” either formally or informally, what you need and how much productivity will be impacted if the process is managed poorly.

Keep in mind that if you were purchasing the materials yourself, you would be accountable not only for your own loss of productivity, but also for impacts to other trades and the project schedule. You can use this as a talking point with the customer if they become defensive over your discussions.

**Unleveled Schedule**

An unleveled project schedule causes multiple impacts, as we discussed in detail in the module on Schedule Management – see [www.dbrownmanagement.com](http://www.dbrownmanagement.com) for more details. Some of the typical problems caused by an unleveled schedule are:

- Over manning to meet demands.
- Learning curve for increased crew size.
- Overtime required to meet schedule.
- Stacking of trades.
Changes to Work

Quite simply, changed work costs more money, regardless of what stage of the project the change occurs. The biggest problem is that changes to work require changes to the project plan, and communication of those changes to the crews doing the work.

This means additional time doing non-installation activities, such as plan reading, layout, and material. The chart below shows that amount of time spent on “Actual Installation” for normal work and changed work.

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<thead>
<tr>
<th></th>
<th>Actual Installation</th>
<th>Non-Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORMAL PRODUCTION</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>CHANGES BEFORE INSTALLATION</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>CHANGES POST INSTALLATION</td>
<td>54%</td>
<td>46%</td>
</tr>
</tbody>
</table>

On the surface, it looks like a straight 5-10% drop in productivity. In reality, that is a **DECREASE** from a baseline of 64%.

**The real decrease in actual installation time productivity is 8-16%**

There is a lot of misinformation in the construction industry that has lead many project managers, foremen, and field crews to believe that there are big dollars in change orders. This misinformation has gotten back to project owners, construction managers, and general contractors who have then developed detailed systems to “manage” these change orders. It has also created a contentious relationship when it comes to negotiating change orders.

**There is nothing more productive than a well-planned project in which the PM, foreman, and crew all execute well and there are no deviations.**

Keep the loss of installation productivity in mind when pricing change orders. Also keep in mind how much productivity is lost when the foreman is busy figuring out a change, ordering material, and writing up paperwork versus being in the field providing information and setting goals to meet the original plan.

**Change orders undermine management’s ability to execute fully on two key pillars of productivity.**
Unclear Contract Documents

There are few things that impact productivity more than when the contract documents, plans, and specifications are unclear or have conflicting requirements.

Attempting to resolve and mitigate these problems means an inordinate of management time being spent on RFI’s, meetings, letters, and other activities that are generally administrative or non-productive in nature.

On a normal project management, PM, superintendent, foreman, and crew leaders should all be spending most of their time on pro-active management activities that support the four pillars of productivity.

<table>
<thead>
<tr>
<th>NORMAL PROJECT</th>
<th>Pro-Active Management Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNCLEAR CONTRACT DOCS</td>
<td>Admin &amp; Non-Productive Activities</td>
</tr>
</tbody>
</table>

A project with a multiple changes and clarifications shifts the focus of the management team, and there is no way for a contractor to compensate because management resources are such a valuable and limited resource. There will be additional management resources committed, but in the end, most of the time is taken away from pro-active management activities.

It is possible to calculate the cost of the additional non-productive activities.

It is IMPOSSIBLE to calculate the loss of productivity experienced because the management was not spending enough time on the four basic pillars of productivity.

Pre-planning can mitigate a lot of these problems, and tracking of production can help quantify the effects of multiple changes and conflicts. Both Pre-Planning and Production Tracking are discussed on greater detail in specific modules from the Management Series – see www.dbrownmanagement.com for more information.
Learning Curves for Additional Crew Members

A typical response to a scheduling problem is to:

“Send someone out for a couple days to help you get caught up.”

Your customer may even send you a letter demanding that you produce extra manpower within 72 hours. While sending additional people may be the answer in some cases, it is important to factor in the learning curve for new crew members along with diluted management (foreman) effectiveness with a larger crew.

If you bring a new crew member on for a week or less, they will have to go through such a learning curve to become productive that the cost impact of their learning curve may not be worth it. You may be better off using selective overtime to work through the problem.

If the problem requiring you to bring on extra manpower was caused by others, then you need to be armed with the facts so that you can negotiate a change order.

This typically only becomes a problem if manpower is constantly moved on and off your project in short durations. It’s very easy to run 10% over budget on labor just because of a constantly changing crew.

<table>
<thead>
<tr>
<th>STARTING POINT</th>
<th>HOURS TO PEAK</th>
<th>TYPICAL LOSS (HOURS)</th>
<th>DAYS (NEW CREW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>8.0</td>
<td>4.0</td>
<td>50% 17% 10%</td>
</tr>
<tr>
<td>10%</td>
<td>7.2</td>
<td>3.6</td>
<td>45% 15% 9%</td>
</tr>
<tr>
<td>20%</td>
<td>6.4</td>
<td>3.2</td>
<td>40% 13% 8%</td>
</tr>
<tr>
<td>30%</td>
<td>5.6</td>
<td>2.8</td>
<td>35% 12% 7%</td>
</tr>
<tr>
<td>40%</td>
<td>4.8</td>
<td>2.4</td>
<td>30% 10% 6%</td>
</tr>
<tr>
<td>50%</td>
<td>4.0</td>
<td>2.0</td>
<td>25% 8% 5%</td>
</tr>
<tr>
<td>60%</td>
<td>3.2</td>
<td>1.6</td>
<td>20% 7% 4%</td>
</tr>
<tr>
<td>70%</td>
<td>2.4</td>
<td>1.2</td>
<td>15% 5% 3%</td>
</tr>
<tr>
<td>80%</td>
<td>1.8</td>
<td>1.0</td>
<td>10% 3% 2%</td>
</tr>
</tbody>
</table>
Stacking of Trades

This is very simply defined as having too many people trying to work in the same area. We all know the problems that this causes with productivity. Some studies have quantified the minimum number of square feet required for productivity around 200 SF.

The graph below is from the NECA publication “Factors Affecting Labor Productivity for Electrical Contractors,” and shows the effect of less average square footages on productivity.

The calculation is based on total workers in “usable” space. You would deduct out all non-usable space such as columns, fixed equipment, and staged material.

It is very common to have all trades responsible for walls stacked together in a very small area trying to work – think about hallways, equipment rooms, kitchens, etc.

If the worker congestion is a known fact when bidding the project, then the productivity loss should be factored into the bid.

Many times this is not the case, and condition does not become apparent until the project schedule is turned out.

Even if you have negotiated a good project schedule that allows you time to do your work, it only takes a few problems to throw the whole process off. A few missed dimensions and a door frame problem will impact the framer, and cause the general contractor to react by throwing all the contractors together to try to rough-in the walls in the finished areas.
Schedule Compression

When the entire schedule, or part of the schedule is compressed, the most likely compensation a contractor will be offered is for the owner to pay for the premium time, and for the contractor to start regular overtime work.

<table>
<thead>
<tr>
<th>DAYS PER WEEK</th>
<th>HOURS PER DAY</th>
<th>PRODUCTION EFFICIENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 WEEK</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td>6</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>95%</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>90%</td>
</tr>
</tbody>
</table>

*Table information from RS Means Construction Cost Data

On the surface, this seems fair, but the reality is that crews are not as productive during longer days; especially if conditions are challenging (hot, humid, cold, wet, etc.) or if there is generally heavy travel involved in getting to the jobsite.

Selective overtime can yield very good productivity, especially when it is combined with solid goals. Regular overtime is a different ballgame.

Crews will start out productive during the first week, but soon the cumulative effect of the additional hours will take their toll and you will see productivity losses.

Along with compensation for the premium time, you need to be compensated for the loss of productivity.

If you cannot negotiate additional compensation, then you need to be aware of this dynamic and do everything you can to maintain productivity. Here are some ideas:

- **Clearer Information:** Crews will be getting tired after the first few days and more prone to mistakes. Make the information clearer and build quality checks into the process.

- **Goals:** Set goals every day, every half-day if necessary, to keep the production up. As the foreman you need to be the head cheerleader.

- **Production Tracking:** Seeing if your production is slipping, and by how much, is critical information to have. In the best-case scenario, you are able to maintain production levels through close monitoring. In the worst-case scenario, you at least have detailed cost information to make a claim for additional compensation – you have the “measured mile.”
Extended Overhead

This is a very easy concept to understand, but also one that has very serious financial consequences. Luckily, these are also relatively easy to quantify and, depending on the circumstances, easy to get compensated for.

Basically, this just means that the project ran over on the schedule. Your basic costs are:

- **Management Time:** For the additional duration you will be taking up foreman time, superintendent time, PM time, and project admin time.

- **Equipment and Tools:** Vehicles as applicable, job trailers, storage containers, tools, toilets, etc.

The easiest way to deal with these is to:

1. Break these out as a separate sheet in your estimate called “Direct Project Overhead” or something similar. Don’t spread these costs around all over the estimate making them hard to consolidate. Be very clear on what these costs are, broken down by the day, and extended over the planned duration of the project.

2. Communicate these in your scope with a clause that states something similar to, “Bid is based on a project duration of 245 working days. Extended overhead costs for additional days are $1,145 per day.”

3. Reiterate this communication when you are doing the schedule review.

4. Bring these up if there is any discussion of schedule extension.

5. Setup your job costing system to capture these costs in a series of dedicated cost codes. Don’t try to spread supervision time across other cost codes. Set up cost accounting to charge tools and equipment directly to the job.

6. Consider allocating project management and project administration time to job costs. In this way, you’ll easily be able to show exactly what your costs are for projects requiring additional time.

7. Build a line-item in every change order with this amount for additional days.

8. If you do a change that extends the time, include the pricing for the additional direct project overhead in the change order.
Beneficial Occupancy

This is the great working condition where you get part way done with the project, and the owner decides that they want to start using the facility or part of the facility.

Usually, you are somewhere around 80% done when they make this decision, and often it is driven because of some other change that was made that is already impacting your work.

This could be changing out a key fixture, piece of equipment, or modifying one of the specialty systems such as security, fire, A/V, or data.

You are now forced to do your work around furniture and people, or other production equipment. Your productivity drops significantly. The chart above is adapted from the NECA publication “Factors Affecting Labor Productivity for Electrical Contractors,” and shows how much efficiency is lost depending on what percentage of the work is done under beneficial occupancy conditions. Quantifying this impact is critical for negotiating for compensation and can be done in the following steps:

- Percent Beneficial Occupancy is figured by dividing the hours you work under beneficial occupancy conditions by the total project man hours will yield this percentage.

- From the chart, determine the Percent Lost Efficiency.

- Use the Percent Lost Efficiency multiplied by the amount of man hours worked under beneficial occupancy conditions to determine the impact.

There is little you can do when the owner decides to move in, other than try to negotiate for compensation, and then to plan the work to minimize impacts to your productivity. Consider also, that beneficial occupancy impact the owner’s productivity as well, so it may be possible to negotiate compensation for off-hours shift work to minimize impacts on their operation while improving your productivity.
Excessive Re-Mobilizations

Remember that on a typical day in construction; only 64% of your time is spent on actual installation activities.

Of the other, non-installation time, at least 17% of that time, is spent on reading the plans, mobilizing to the work area, getting materials, laying out the work area, and cleaning up.

What happens when you have to re-mobilize to another work area during the day?

The answer is simple. You more than double these costs for the day – lowering the actual installation time to less than 50%!

This is an amazing hit to productivity and is compounded if you have to move more than two times.

“Finding Work” for your crew is never a productive strategy.

Planning has a lot to do with how many times a crew has to mobilize to an area, but most of the time these re-mobilizations are dictated by the customer and are beyond our control.

Often, there is a contract clause stating something like “General contractor has the authority to direct day-to-day direction of work in order to meet schedule.”

This is a difficult clause to overcome. This is why your scope letter should have some language in it relating to a “reasonably leveled” schedule and about what needs to be done for you to perform an efficient installation, which is also covered in your schedule negotiations.

Additionally, you need to be able to present the impacts to your work in dollar amounts, which we cover in the module on Production Tracking. If the customer sees that you have a “measured mile,” and can demonstrate the impacts, they will most likely go pick on another contractor – this isn’t the best solution, but it is the best solution for you!
What You Can Do – Fighting Back

Fighting back against external productivity impacts is challenging, but you can follow a basic outline for building this capability into your team and your company:

- **Knowledge:** Just having the ability to recognize, and quantify, the various impacts that happen is the first step. Complaining about the problems over donuts and coffee on the jobsite, and then complaining some more when you look at the job cost reports, is not enough. You need to intimately understand the impacts, the root causes, and be able to accurately quantify the costs.

- **Communication (Internal):** EVERYONE involved in projects in your company, from the estimators to the apprentices, need to be trained on a regular basis about the impacts to productivity; how to identify them and how to mitigate them. Often an impact can occur in an isolated area of the project, with just a journeyman and apprentice working over there. If they don’t know to bring this to the attention of the foreman, then the impact goes un-noticed and profits are lost forever.

- **Tools:** Develop tools and systems within the company to fight productivity impacts. These tools include clauses for scope letters, letter templates, Excel tools for calculating the cost of impacts, etc.

- **Communication (External):** Strategically educate your customer as to the cost of various impacts. This is one of the most important things you can do. Do it in a nice but firm way. Be professional. If they fall into the category of a “screamer,” then they will likely scream at you and act offended, but will probably pick another, less sophisticated target. If they fall into the category of “professional,” then they will respect your professionalism and you will have a good working relationship.

- **Cost and Production Tracking:** If you can’t track it, then it didn’t happen! Get that in your head and stop complaining about the problems around the gang box if you can’t quantify them. If you want to fight these impacts, then you need the systems to track production and prove impacts.
Activity: Top Productivity Impacts and Mitigation

Break into small cross-company groups with a maximum of five people.

Make a list of the top impacts to productivity IMPOSED BY OTHERS on your projects.

Brainstorm what you can do about these to mitigate the impact and/or get compensated.

Present and discuss ideas with class.
Developing Stronger INFRASTRUCTURE for CONTRACTORS

Will Your Infrastructure Support The Company You Want To Build?

STRATEGIC OPERATIONS
Alignment Of Markets, Systems & People
Project Management / Field Management
New Market Planning & Startup

FINANCIAL PROCESSES
Integrated Operations & Accounting
Management Reporting
Cash Flow Management

TECHNOLOGY
Streamlined Workflow
System Conversion / Integration
Custom Programming (Excel / Office / SQL)

BUSINESS DEVELOPMENT
Marketing
Sales
Estimating

TALENT – “PEOPLE PROCESSES”
Organizational Planning
Review & Compensation Processes
Aligning Personnel & Company Goals

A Hands-On Approach

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We are so confident that our services will add value to your business that we want to share risk with you.

Most management consultants will talk to you about the risks of business but themselves take very little risk with conservative time & material billing rates and little in the way of performance guarantees.

There are times when this is necessary but for most projects we strive to look at alternate pricing methods that provide sharing of risk.

Monthly Retainer: Regularly scheduled on-site and/or phone meetings keep your projects moving forward. These have proven to be the most effective programs for driving long-term change.

Fixed Price: As much as possible we will work together to clearly define a project to the point of being able to provide a lump-sum pricing structure with mutually agreed upon deliverables and payment schedule.

Results-Driven: We will seek to tie as much of the pricing to specific results-driven deliverables as possible. If you don’t get the value we discussed you don’t pay.

Payment Timing: Many projects have heavy up-front costs but the business results are longer-term. We recognize this and will spread the payments over time – tied to the future results as applicable.

Contingency Pricing: For some projects we will tie up to 100% of the pricing contingent on the outcome.

The early roots of this company started to grow in the early 90's, not long after I turned out as a Journeyman Electrician and started running work. What bothered me then and continues to bother me today is that there is basically a lot of inefficiency in the construction management process.

Because this inefficiency is industry-wide across all trades I view this as a minor problem and a HUGE OPPORTUNITY.

I have worked hard to put systems in place to improve the process in a variety of capacities working my way from apprentice to the executive level and making several horizontal moves along the way to deepen my experience in accounting, marketing, HR, and technology. Today I am proud to be able to offer solutions to a lot of those problems through the great team at D. Brown Management.

The D. Brown Management team consists of a group of experienced professionals from the construction industry who have proven themselves at the senior management level with bottom-line results.

Each team member has their own specialty including operations, productivity, finance, technology and marketing. We work at the intersection of those systems with a heavy focus on the Project Management processes. It is our depth and breadth of experience in the other areas and how they all interrelate that really creates the results and is our key differentiator.

Our goal is to integrate thoroughly with the client's team working in a "Hands-On" Approach to help build a stronger business.

We offer a variety of solutions for the construction industry ranging from structured programs to training to meeting facilitation to special projects. Thank you for taking the time to get to know our company. Please call or e-mail me with any questions.

Sincerely,

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Strategic Operations & Business Planning

Planning is important but without execution and follow-up it is at best a waste of time and can seriously impact morale and actually have negative effects on an organization.

By combining higher level strategic planning with detailed operational planning and a structured follow-up process including a strategic 5 year schedule, monthly written updates, a secure client website for collaboration, action items and status and regular, professionally facilitated status meetings a culture of planning and execution will be built into the culture of the organization.

Project Management

- Schedule Delays Cost Between $600-$1,000 Per Day Or More
- A 5% Increase In Production Can Be Worth $50,000 Per Year

Effective Project Management is a primary driver of profitability for contractors. We provide custom designed Project Management training programs specific to your company, your people and your processes with focus on processes, pre-planning, production tracking, schedule management & customer relationships.

Streamlining – Saving Money & Improving Quality

Until you stop trying to manage people and focus on managing processes while leading people you will constantly be struggling just to sustain your organization much less grow it.

You probably started your business because you had a great idea about doing something better. Most likely it was on the customer relationship, employee or productions side. For the business to keep growing you must look at every process, document it, analyze it, streamline it and develop training for it. An experienced third-party can be very helpful with this project.

Talent – “People Processes”

In the end it all comes down to people – the business will not grow without the right people in place doing the right things. If you already have your strategy down, are generating the business and have streamlined most of your processes it is time to look at the “People Processes”

We can help you turn your business strategy and operations plan into a “People Plan” to guide recruiting, training, reviews, compensation and benefits.

Special Projects

One of the biggest challenges a growing business faces is not having the resources to effectively take advantage of an opportunity, develop a new idea or solve a specific problem.

You may have a need for a high degree of expertise for a limited period of time but think you need to pass on the opportunity or try to implement it with less able talent that you can keep employed on a regular basis. We will work with you to design a clear scope and timeline and in most cases will provide you a fixed price for the project.

RCCA - Rapid Construction Company Analysis

A structured method of analyzing the critical aspects of a contracting business including a company overview, technology systems, safety, future goals, talent, financial structure, project management team and market development.

This assessment allows us to more fully understand your organization and for you to more fully understand our approaches and what insights we are able to offer.
The primary purpose of accounting should be to provide the right information at the right time in order to enable better decision making.

Basic accounting does not necessarily provide this information. It is designed more around tax code, Generally Accepted Accounting Principles (GAAP) and very basic summary information.

We design all reporting packages to integrate with your accounting system and other databases to eliminate duplicate data entry while providing critical management information.

Integration: Work with your company to understand the operations, management decision process, IT systems, accounting software, accounting processes and needs of your bank/bonding company so we can integrate that information into your financial reporting.

Training & Automation: Develop customized training for your team and automate as much of the process as possible.

Support Your Decisions With The Right Information

Software selection is one of the most critical things you can do as a business. You are basically trying to mirror your critical business processes in software.

Done correctly software can streamline your business significantly. Done incorrectly it can cost hundreds of thousands of dollars in lost productivity.

Our structured approach along with experience across multiple contracting businesses ensures an effective implementation.

We look at your business needs first and the software second tailoring the selection and implementation around your business.

Nothing will have a bigger effect on your bottom-line than building a stronger top-line.

We work with contractors to help them develop strong marketing and business development processes that provide a steady stream of high-quality projects to the estimating team.

Our focus is not just on the sales side but on the creation of the marketing package, refinement of a target market and setting up the marketing administrative systems that help deliver consistent results.

Technology is a critical part to any business and can be especially productive for contractors. Our experienced team of IT Professionals focuses on nothing but the construction industry.

We work on projects ranging from daily management of a client’s network to complete integrations tying together the field, project managers, estimators and accounting while providing real-time information to the desktops and Blackberry’s of the business owners.
Guaranteed RESULTS

Business is about taking and managing risks. Any project to improve or change your business infrastructure has a lot of risks. We seek to share those risks with you to more closely align our interests and improve the chances of success.

It’s a small world and reputation is king. We understand this and make a few basic promises about our services:

- We will always conduct ourselves with the highest degree of professionalism.
- We will always act ethically.
- We will always deliver on schedule.
- We will price our services to share performance risk with you.

The bottom line is that if unsatisfied with the results achieved you are not obligated to pay. We believe very strongly in our ability to help your business and look forward to working with you.

Learn More ONLINE

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Each client is unique in their needs and a specialized plan will be tailored around their goals, current status and execution ability.

This plan is strategic in nature and is designed in conjunction with the owners / management team prior to the start of the project.

Adjustments are made to the roadmap milestones on a quarterly basis during the Executive Meetings.

A 3rd party can substantially accelerate implementation and change by bringing in outside ideas, perspective and energy.