



7 Best Practices to Make Your Engineering Firm Less Chaotic

Save Time, Reduce Stress, and Get Back to the Work You Love.

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Introduction

Running an engineering firm can feel like navigating controlled chaos. Between managing client expectations, meeting project deadlines, overseeing firm finances, and keeping your team focused on the right things, it's easy for your schedule to become overloaded. Most firm owners started their practice because of their love for solving problems for their clients, only to find themselves overwhelmed by the day-to-day demands of running a business.

However, this doesn't have to be the case. Your business can be as well-designed and structured as the projects you craft for your clients. Approaching your business with intention, and thinking of it as a creative design project, can lead to a more rewarding experience as a business owner, freeing yourself to focus on the work you love.

Whether you're drowning in administrative tasks, struggling to keep your team on the same page, or wanting to reduce stress and open your time, the principles outlined throughout this book will guide you toward a more efficient, productive, and enjoyable work environment. Each point gives an overview of why it is important and provides an actionable step to implement at your firm.

By implementing best practices from strategic design thinking to leveraging technology, you can save time and reduce stress while getting back to focusing on the creative work that led you to start your firm in the first place.



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BEST PRACTICE 01

Design: Treat Your Business Like a Design Problem

As engineers, design and problem solving is at the core of everything you do. You approach each project by analyzing client needs, developing creative technical solutions, and iterating on your designs until they offer the best outcome for your client's problem with an elegant and effective solution.

When it comes to running your firm, the same level of intentionality and design thinking often falls by the wayside. Instead of thinking through how you want your business to be run, you get distracted by the billable work. This is completely understandable. You want to do the work you love. However, just as you carefully plan out each project, it's crucial to treat your business as a design problem that requires thoughtful, strategic planning. This will save you time and stress in the long run and give you the ability to refocus your time on the work you love.

Engineers excel at problem solving but often overlook the business side of running a firm.

It's no secret that engineers are passionate about understanding how things work, solving complex problems, and creating innovative solutions that improve the world around them, but many struggle with the day-to-day realities of managing a business. From tracking finances to managing staff and projects, the operational side of a firm often feels like a necessary evil. However, neglecting these aspects can lead to inefficiencies, burnout, and lost revenue. The key is to shift your mindset: instead of seeing business management as a burden, approach it like a design challenge. If you excel at solving complex problems, you can just as effectively design a successful business. Business operations can be fun and can involve creative problem solving. Embrace this as an exciting part of your role as a firm leader.

Actionable Step:

Set aside time each week to focus solely on the business side of your firm. Review financials, think through operational challenges, and develop solutions to test with your team.

Approach your business with the design thinking principles that you apply to your projects.

Design thinking is a problem-solving approach that engineers already use every day. The core steps—defining the problem, brainstorming ideas, prototyping solutions, and iterating based on feedback—can be easily translated to business challenges. For example, if you're struggling with project management inefficiencies, start by clearly defining the pain points: Are deadlines being missed? Is communication between team members unclear? Once the problem is defined, you can brainstorm potential

Actionable Step:

Choose one business challenge, such as project management, cashflow, or communication. Define the problem with your leadership team,

solutions, prototype new workflows or tools, and make adjustments based on the measurable results.

By taking a structured, iterative approach, you can systematically improve every area of your firm. This will take time, and there will always be new challenges and opportunities for improvement, but it is important to make this a regular part of running your business. By starting this as early as possible, it will set up for company and team to have continual improvement ingrained in their habits.

brainstorm solutions, and implement one as a trial. Gather feedback over a month and adjust the solution if necessary. Repeat this process monthly with different firm challenges to continuously improve your operations.



Use design thinking to strategically define and structure how your business operates.

In the same way you might develop a BIM model or a structural analysis before constructing a building, you should create a strategic plan for your business. This includes defining your firm's mission, vision, and values, and determining the key processes that will guide daily operations. Think of this as creating an operations manual for how you want your business to run, from client engagement to project delivery.

For example, how do you want your team to communicate? What tools will be most effective for internal vs external communication? How should projects flow from initial consultation to design phases, into construction? What project management software and processes can you implement to ensure efficiency and accountability? By thinking through these questions and defining the solutions upfront, you can create a solid foundation for your firm's long-term success.

Actionable Step:

Create a strategic plan by defining your firm's mission, vision, and key processes. Outline client engagement, project flow, and communication tools, then document everything in an operations manual. Review with your team to ensure clarity and alignment.



By thinking through these questions and defining the solution upfront, you can create a solid foundation for your firm's long-term success.

Be intentional with every aspect of your business, from operations to client management.

Intentionality is key to running a high performing business and keeping your team on track. Just as you wouldn't design a bridge without considering every material and every load, you shouldn't run your business without a clear strategy for each of its components – from financial management, resource planning, to staff mentorship and training.

This means being thoughtful about your firm's structure, finances, people, and workflows. Are you using the right tools to manage projects or would investing in a new technology help improve your team's performance? Is your pricing model sustainable and driving profits? Are you investing in the right areas to grow your team's knowledge and skillset? There should be documented answers to these questions and you should engage your firm leadership team to discuss each of these and develop an action plan for implementation.

Additionally, client management should be a top priority across all aspects of your operations. How you and your employees interact with clients, from the initial consultation to the final project handover, has a huge impact on your reputation and future referrals. Being intentional about client communication and the client experience ensures that every interaction is consistent and aligned with your firm's goals. And this shouldn't stop when the project is complete. Customer experience starts from the first interaction and continues for as long as your firm exists.

Actionable Step:

Conduct a firm-wide review of all major business components—operations, finances, client management, and staff development. Identify areas for improvement and create a clear strategy for each. Document these strategies and ensure your leadership team develops an action plan for implementation.

Communicate effectively with your team to ensure everyone is aligned, working toward the same goals.

No project is successful without collaboration, and the same goes for your business. It's essential that everyone on your team is aligned in the firm's values and mission and are working toward the same goals. Regular communication through firm-wide meetings, team standups, project check-ins, 1:1 management meetings, and digital communication tools is critical for keeping your team on track.

Clear, consistent communication helps avoid misunderstandings, keeps projects moving forward, and empowers your team to make decisions confidently.

In addition, make sure your team is aware of the larger goals and vision of the firm. Every employee should know the firm's mission statement, be familiar with the company's shared values, and know the future vision the firm owners have for the business. When everyone understands the "why" behind their work, they will be more motivated, engaged, and invested in the success of the firm. Getting everyone to row in the same direction will help your business succeed.

Communication is challenging. Often people assume others understood what was said or shared, while the other party interprets the message differently. When in doubt, over communicate – ask others to repeat the message so it is clear that everyone is on the same page.

Actionable Step:

Hold regular team meetings, project check-ins, and 1:1 sessions to align everyone with the firm's goals and vision. Ensure each employee understands the firm's mission, values, and objectives.

BEST PRACTICE 02

Document: Create Repeatable Systems and Processes

One of the most significant challenges in running an engineering firm is ensuring that operations are streamlined and efficient, regardless of who is managing the tasks. This is especially true of growing companies that are bringing on new staff members and need to get them onboarded efficiently.

Chaos often arises when processes are left to chance, handled in an ad-hoc fashion, or overly dependent on firm owners or other individuals in the company. To combat this, it is critical to establish repeatable systems and processes for every aspect of your business, document them meticulously, and train your team to execute them flawlessly. This approach will not only enhance efficiency but will also free up firm owners to delegate tasks and focus on high-level strategy and growth.

Establish systems and processes for every area of your business.

No part of your firm should operate without a clearly defined system. From developing proposals, to new client intake, to project management and billing, every area of your business needs structured processes in place. These systems act as the framework that keeps your firm functioning smoothly, ensuring that nothing slips through the cracks and that each task is completed consistently and accurately.

This includes the way your team handles marketing, business development, project kickoffs, communication, invoicing, professional development, and even how they approach creative problem-solving.

Without standardized systems, firms often find themselves repeating the same mistakes, wasting time with inefficiencies, and experiencing unnecessary stress. Instituting formal processes allows your firm to run predictably, no matter who is doing the task, the complexity of the project, or the number of clients you are serving.

Actionable Step:

Develop a list of all areas of your business that can be systematized, including client intake, project management, billing, marketing, and communication.

Ensure all processes are documented.

It isn't a system if it isn't documented. Every process should be written down and stored in an accessible location for your team to refer to whenever needed. This documentation serves as a guide

for how things should be done, providing clarity and eliminating the guesswork that leads to errors and inconsistencies. This library of standard operating procedures helps everyone in the firm maintain quality control, helps junior staff learn how to execute on new assignments, and helps new hires know how your firm works.

Consider the documentation of your systems as your firm's instruction manual. It should cover everything from how to handle client inquiries, step-by-step instructions for completing a design review, or even the process to send invoices to clients.

Detailed documentation not only helps new team members get up to speed quickly but also ensures that your firm's work is done in the same way, regardless of who is involved. When everything is written down, you have a reference point for training and troubleshooting, and you can avoid the pitfalls of institutional knowledge being lost when key staff members aren't available or leave the business.

Actionable Step:

Document all key processes in a centralized, easily accessible location. Ensure the documentation is detailed enough to guide new hires and junior staff, serving as your firm's instruction manual. Regularly update and reference these documents to maintain consistency and quality across the team.



Delegate to others, not the firm owner.

One of the most common bottlenecks in engineering firms is when the owner or principal is too involved in day-to-day operations or the minutia of project work. While it is tempting to have a hand in everything, this is neither sustainable nor productive – and most likely drives your employees nuts. Firm owners should focus on leadership, business development, and strategic decision-making—not on handling every task themselves or micromanaging their team.

The solution is delegation. By creating and documenting repeatable systems as discussed above, firm owners can delegate tasks to other team members with confidence they will be completed correctly and to the company's standards. These processes should be structured so that anyone in the firm, from a project manager to an EIT, can handle critical tasks without constant oversight from leadership. This not only reduces the burden on the firm owner but also empowers employees to take ownership of their work.

Actionable Step:

Track everything you spend your time on over the next week. Take the list and circle all items that could be handled by someone else at the firm. Document the process you want them to follow to achieve the results you expect and delegate that task to the right person.



By creating and documenting repeatable systems, firm owners can delegate tasks to other team members with confidence they will be completed correctly and to the company's standards.

Successful delegation requires trust in your team and in the systems you've put in place. When standards aren't met or expectations are

missed, it is most likely due to the lack of systems in place rather than the fault of your employees. When you document everything clearly and ensure that processes are repeatable, you eliminate the fear that tasks will be done incorrectly.

It's about building a business that runs efficiently, even when the firm owner is not directly involved. This is the only way a firm can scale successfully. Firm owners must be able to relinquish control and trust their teams to get the work done successfully.

Train your team on how to execute these processes.

Creating systems and documenting them is only part of the solution. The final, and arguably most important, step is training your team to follow these processes. Every employee should be thoroughly trained on how things are done in your firm. This training should not be a one-time event but an ongoing effort to ensure that everyone is up to date with any process changes or improvements.

Training ensures consistency in execution and helps your team feel confident in their roles. When everyone understands the processes and how to follow them, the firm operates more efficiently, and mistakes are minimized. Regular training also creates a culture of accountability—each team member knows what is expected of them, and they have the resources they need to succeed.

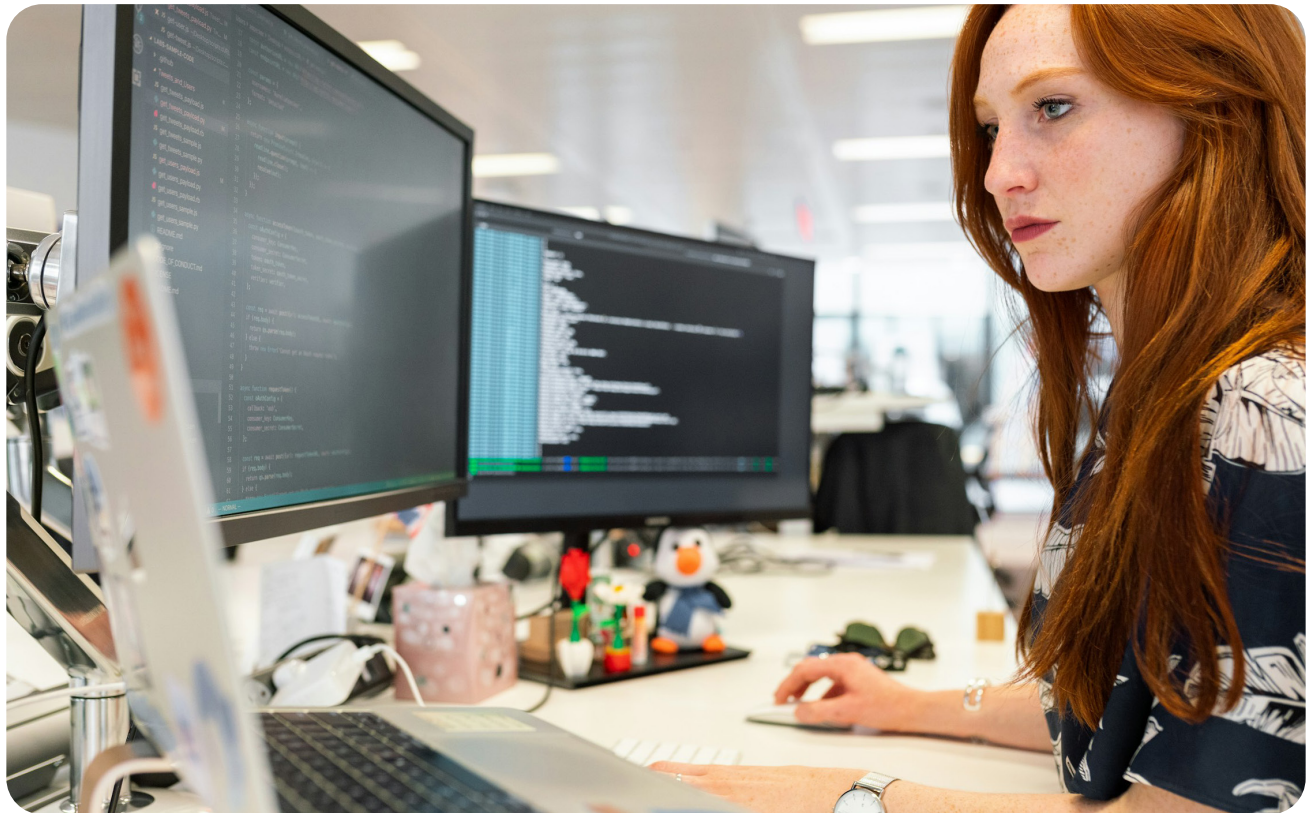
Additionally, training your team on these systems can help foster a culture of continuous improvement. Once team members are familiar with the documented processes, they can provide feedback

Actionable Step:

Identify the biggest weaknesses in your team's execution of projects. Pick the most impactful area and find a training opportunity to improve your team's capabilities in that area – turning the weakness into an area of strength. Repeat this on a monthly or quarterly basis.

on what's working well and where improvements can be made. Over time, this leads to more refined, efficient, and effective systems that benefit the entire firm.

Training should be a foundation of every firm. The most successful engineering offices make continued learning one of their main values and invests in training for each role. As individuals grow within the office, additional training opportunities are introduced to get them ready for new responsibilities, moving into new roles, and to stay on top of industry trends and technological changes.



BEST PRACTICE 03

Hire: The Right People in the Right Seats

Building a growing and scalable engineering business requires more than just exceptional design skills and a beautiful portfolio. It demands strong business acumen, strategic thinking, and efficient operations. The key to managing all these components effectively isn't doing it all yourself, rather it means hiring the right people to take on key roles in your firm. Firm owners who delegate to specialists free themselves to focus on leadership and high-level strategy, while ensuring that their business is supported by a team of experts in every critical area.

Delegate most tasks to the right people.

A firm owner's time should be spent leading and driving the strategic direction of the business, not buried in day-to-day tasks that can and should be handled by others. A common mistake many engineering

firm owners make is trying to do everything themselves, from project management to financial oversight, or not trusting others to take on tasks. This approach not only spreads you too thin but also limits your firm's potential for growth.

To scale your business and maintain operational excellence, it's crucial to delegate most tasks to qualified individuals. This doesn't mean handing off everything without oversight, but it does mean trusting your team to handle specific areas of the business while you focus on the bigger picture.

A good way to test if you have been successful in this area is to consider if you, as the firm owner, or other firm leaders, could leave for an extended period and the firm can maintain its operations sustainably. A resilient firm should be self-sustaining if any individual leaves, including members of the leadership team. Things like business development, marketing, invoicing, client relations, and project management should continue to operate smoothly even without owner involvement.

Hire experts for each role.

When building your team, it's essential to hire people who are experts in their respective fields. While engineers are trained in complex problem solving, they are not necessarily the best at managing marketing, finances, or IT for example. You need people who are specialists in their area of work—professionals who bring a depth of knowledge that can elevate the firm.

Actionable Step:

Make a list of tasks you are currently doing that can be delegated and develop a plan to hire or assign those responsibilities to the right team members.

Actionable Step:

Define the key roles in your firm (marketing, finance, project management, etc.) and create detailed job descriptions that outline the expertise required for each position.

For example, hire a marketing expert to handle your firm's branding, digital messaging, and client acquisition strategies, a financial expert to manage budgeting, forecasting, and profitability, and a project management expert to oversee timelines and client management. Each of these roles requires specific skills that engineers don't necessarily possess, so it's important to find the right person for the job.

Don't limit hiring to engineers.

If there is one mistake that most A&E firms make this is it. While engineers are crucial for project work, not all areas of your business require an engineering background or education. For roles like IT, marketing, finance, and even things like drafting and project management, it's often more beneficial to look outside the engineering industry to find people with the right experience and skill set.

Hiring professionals from other fields brings fresh perspectives and specialized skills to your firm. For example, a financial controller with experience in other industries might introduce new methods for managing cash flow or profitability. Similarly, a marketing expert from a different sector might have innovative ideas for expanding your client base.

No other industry limits their talent pool as much as A&E does. It is a major weakness that a smart firm owner should aim to overcome.

Actionable Step:

When hiring for non-design roles, actively seek candidates from outside the engineering field. Broaden your search to include professionals who are experts in their discipline, regardless of their familiarity with the AEC industry.

Find and vet the right talent.

Hiring the right people doesn't happen by chance. You need a structured process for identifying, interviewing, and vetting candidates to ensure they are the best fit for your firm. Start by clearly defining the responsibilities and expectations for each role, then craft interview questions that test not only design skills or technical abilities but also cultural fit.

When vetting candidates, look beyond their resume. Consider their problem-solving skills, how they handle challenges or conflicts, and whether their values align with your firm's culture. Don't rush the process—take the time to find the best person for the job, even if it means extending your search. A great guiding principle is to hire slow and fire fast.

Actionable Step:

Create a standardized hiring process for your firm, including steps for job posting, interviewing, skill assessments, and cultural fit evaluations.



Building a team of specialists strengthens the firm.

When you hire experts in their respective fields, you build a team that functions efficiently and effectively. Each person can focus on their area of expertise, leaving you free to concentrate on growing your firm and delivering outstanding design. This not only improves the quality of your operations but also allows your firm to scale without compromising on the quality of your work.

For example, having a skilled project manager ensures that projects stay on track and on budget, a specification specialist can recommend the ideal materials for a given situation, while a financial expert keeps your books in order and maximizes profitability. With the right people in place, your firm becomes more agile, more capable of handling larger, more complex projects, and more attractive to potential clients. Plus, it allows for cross pollination of ideas and enables your team to learn from each person's strengths and experiences.

Actionable Step:

Conduct regular evaluations of your team structure to ensure each role is filled by someone with the right expertise. When considering promotions, design a professional development plan for each person that is promoted to a new role.



Each person can focus on their area of expertise, leaving you free to concentrate on growing your firm and delivering outstanding design.

BEST PRACTICE 04

Manage: Transparency, Data, and People

Successful engineering firm leaders understand that managing people, data, and processes effectively is critical to the growth and success of their firms. Creating a culture of transparency, empowering your team with data, and investing in people management are key pillars in running an efficient and profitable firm.

Foster a culture of transparency.

Transparency is the foundation of trust and accountability within a firm. When you open your firm's data, such as project fees and schedules, firm financials, contracts, and resource planning, to your team, you empower them to take ownership of their work. By sharing critical information, you eliminate the "knowledge gaps"

Actionable Step:

Enable permissions in your firm management software so all team members can access key data such as project schedules, fee

that often cause confusion, delays, and misaligned expectations. A transparent firm is a stronger firm, as team members can self-manage their tasks, projects, and decisions.

Transparency isn't just about making data available; it's about ensuring your team understands that data and knows how to act on it. Giving access to project financials or timelines allows individuals to make informed decisions and take responsibility for their role in the firm's success.

structures, budgets, and timelines. Use a centralized platform where this information is updated regularly and easily accessible. Communicate to the team how to interpret and use this data for decision-making and self-management.



Transparency isn't just about making data available; it's about ensuring your team understands that data and knows how to act on it.



Empower teams with data.

When data is readily accessible and visualized in a meaningful way, your team can actively manage their own workloads and projects. This level of transparency builds accountability. Make data visualization tools and project reports available to everyone in the firm, ensuring they have the information needed to manage tasks and make decisions effectively.

Providing access to project reports, financials, and key performance indicators (KPIs) allows team members to spot issues before they become critical. Whether it's tracking a project's financial health or seeing where timelines are falling behind, the ability to visualize and act on data empowers the entire team to deliver projects on time and within budget.

Actionable Step:

Invest in data visualization tools that offer real-time reporting on project statuses, financials, and KPIs. Set up automations to send the reports to the right people on a set schedule. Conduct training sessions to ensure your team understands how to use data to self-manage and enhance project outcomes.

Utilization



3,809

Billable
Hours

236

Non-Billable
Hours

\$158,993

Revenue/FTE

Invest in people management.

Managing people effectively is one of the best investments you can make in the future of your firm. Regular, structured communication with your team, such as 1:1 meetings, builds a stronger connection between leadership and staff. These touchpoints allow you to address concerns, provide feedback, and offer guidance in real-time, rather than relying on annual reviews, which are often too little, too late. It is recommended that everyone holds 1:1 meetings with their direct reports on a weekly basis.

Frequent communication helps to align your team with the firm's goals, and it gives them the support they need to perform at their best. Instead of reacting to problems, regular check-ins allow you to proactively manage your team's progress and development.

Actionable Step:

Have every person identify their direct reports and schedule recurring 1:1 meetings with each person. Use these meetings to review progress, address challenges, and provide immediate feedback. For example, firm principals may hold 1:1 meetings with the Project Managers, PMs hold them with the project engineers, and engineers manage the EITs..



Use meetings to review progress, address challenges, and provide immediate feedback to your teammates and firm.

Provide ongoing training.

Your people are your greatest asset, and your biggest expense by far. Investing in their development is crucial for your firm's long-term success and some of the best investments you can make. Providing ongoing training opportunities for your team helps improve their skills, keep them engaged, and ensure they are well-prepared to take on new challenges. Whether it's project management, new software, or client relations, continued learning should be a key part of your firm's culture.

It's not enough to expect your employees to figure things out on their own. If they lack skills, it's your responsibility to ensure they receive the proper training. By prioritizing professional development, you create a more capable and motivated team, which ultimately benefits your clients and strengthens your firm's reputation.

Actionable Step:

Create a professional development program that offers regular training in key areas such as project management, financial literacy, and new industry tools. Make training a requirement for all employees and track their progress to ensure consistent skill development across the firm. Find learning opportunities that all employees can go through so there is shared knowledge.



BEST PRACTICE 05

Communicate: Customer Experience is Key

In today's competitive market, the firms that stand out and win the most work are those that excel in customer experience. A great design may get you noticed, but it's the client's overall experience that leads to them hiring your firm, return with repeat business, and provide valuable referrals.

The most successful engineering firms recognize that client communication and service are as critical as the design itself. Crafting an exceptional customer experience requires intentional planning, consistent communication, and a structured approach that turns clients into advocates for your firm. Here's how to approach customer experience as a core business function.

Treat customer experience as a design problem.

Designing a great customer experience is no different than designing an efficient system. You need to be intentional about every interaction with your clients. From the sales process and the first consultation through the design process and all the way through project completion, each step of the process should be thoughtfully crafted to ensure a seamless and positive experience. This requires looking at the client's journey from their perspective: What information do they need? How do they feel during each stage of the project? What are their expectations? What are their concerns?

By treating customer experience as a design problem, you can create systems and processes that ensure every client feels valued, informed, and confident in your firm's abilities.

Actionable Step:

Map out the entire client journey in graphic form, from initial inquiry to project completion. Identify key touchpoints and opportunities to enhance the experience at each stage. Design specific steps to improve communication, responsiveness, and service delivery.



Weekly client communication is essential.

Consistent communication is the foundation of a great customer experience. Clients want to feel informed and involved, even when there are no major decisions needed or updates to share. Weekly communication ensures they know the status of their project, understand the next steps, and have the opportunity to ask questions or address concerns. This transparency builds trust, reduces anxiety, and prevents misunderstandings that can lead to dissatisfaction.

By setting a standard across your team to provide all clients with weekly updates, you're not only keeping clients in the loop but also reinforcing your commitment to their project. This habit sets the stage for smoother project management and a stronger client relationship. This will also set your firm apart from your competitors, making your clients more likely to return with repeat business or recommend you to their peers.

Actionable Step:

Implement a policy of weekly communication with all clients. Use a consistent format for these updates (such as email or a project management platform) to provide status reports, upcoming milestones, and any relevant project developments. Have every project manager send an update to every client every Friday. Make this a habit that becomes second nature.



Use a consistent format for weekly communication updates, such as email or a project management platform.

Train project managers to build communication habits.

Project managers play a pivotal role in maintaining client relationships since they often have more direct interaction with the clients than firm leaders or owners. This is especially true as firms grow. A PM's ability to communicate effectively can make or break the client's experience. It's essential to train your PMs to view regular communication as a core responsibility, not an optional task. This ensures that communication doesn't fall by the wayside during busy periods or when issues arise.

Creating a habit of consistent communication means that PMs will keep clients informed even when there's little to report, preventing clients from feeling neglected. Regular training and reinforcement of these habits will help instill a culture of communication across the firm.

Actionable Step:

Provide training to your PMs on effective client communication. Set expectations for weekly updates, and establish check-ins with PMs to ensure they are following through on these habits. Training should include writing skills, presentation skills, and training in the specific systems and processes your firm has established for these tasks.



Turn clients into advocates.

Exceptional service turns clients into advocates for your business. Clients who feel valued and well-served are more likely to refer your firm to others and speak highly of you in their networks. This word-of-mouth referral is one of the most powerful business development tools, as it builds trust and credibility even before potential clients interact with you.

To turn clients into advocates, you need to go beyond meeting expectations—you need to exceed them. This means delivering on your promises, solving problems before they arise, and maintaining a proactive and positive attitude throughout the project. A client who feels supported will be more inclined to recommend your firm to others.

Actionable Step:

Create a phase-by-phase follow-up system where you check in with clients after each phase is completed. Ask for feedback and explore opportunities to deepen the relationship or course correct if their experience isn't exceptional.



Develop a standard process to request testimonials and if appropriate, directly ask if there are opportunities for working together again on other projects or for referrals to their peers.

Systematize communication across the firm.

For your firm to deliver a consistent and exceptional client experience, communication must be systematized. Relying on ad-hoc methods or leaving communication entirely in the hands of individual team members can lead to inconsistencies. By creating standardized processes—using templates, tools, and automations—you ensure that every client receives the same high level of service, no matter who is managing their project.

Standardizing communication also reduces the time and effort required to keep clients updated, making it easier for your team to stay consistent. Templates for project updates, automated reminders for weekly check-ins, and communication guidelines help streamline the process across the firm.

Actionable Step:

Develop communication templates and automate reminders for client updates. Use tools like project management software or CRM systems to track communication and ensure consistency across all projects and team members.

BEST PRACTICE 06

Train: Foster Continual Learning

Your team is your most valuable asset. The knowledge, skills, and expertise your employees possess and bring to each project directly impacts the quality of work you deliver to clients and the overall success of your business. As the industry evolves, continual learning and professional development are essential not only for the individual growth of each employee but for maintaining your firm's competitive edge in the marketplace. Investing in structured, ongoing training ensures that your team is always equipped to handle new challenges and opportunities.

Your team is your greatest asset.

Not only is your team your greatest asset, it is also your most expensive – by far outpacing any other operational expense.

Actionable Step:

Conduct regular
employee evaluations
to identify skill

Investing in the development of your employees is one of the best investments you can make and a vital part of a strategy targeting long-term success. This investment will have a profound impact on your firm but also on the career of each individual.

As projects become more complex, clients demand increasingly sophisticated solutions, and technological advances shift the design process, your team must be prepared to adapt and excel in new areas. Continuous investment in their skills not only increases job satisfaction and retention but also improves the quality of work delivered by your firm. The firms that embrace continuing education are the ones that will thrive in the future.

gaps and growth opportunities. Ask your employees what additional training they are interested in or what skills they feel they lack. Use this information to design personalized development plans that align with both the firm's goals and the individual's career path.

Offer structured training in key areas.

Once you have identified areas that your team needs improvement, through employee reviews, a firm-wide questionnaire, or through a review conducted by the leadership team, offer structured training in essential areas that you identify as having the biggest impact.

Common topics that firms should offer structured training in include project management, financial literacy, software tools, design techniques, professional communication, writing, and public speaking skills. These are just a few recommended areas to focus on but by no means is it an exhausted list. Each firm has different areas they may want to focus on strengthening the skillset of their team to provide better service to their clients.

The ongoing learning opportunities should help employees stay

Actionable Step:

Develop a quarterly training program that includes workshops, seminars, or online courses. Identify certain programs you want everyone to participate in. And identify specific training opportunities that are relevant for each role at the firm. Track participation and assess the

current with industry trends and improve their technical and managerial abilities. By offering training that spans a range of competencies, you ensure that your team remains adaptable, effective, and prepared to tackle a wide variety of projects. It is also advised to have multiple people go through training together so there are shared experiences, the ability to support each other, and have the training impact more teams and projects across the office.

effectiveness of the training through employee feedback and performance reviews.



Focus on strengthening the skillset of your team to provide better service to your clients.

Make training part of the job.

Training shouldn't be an afterthought or something that happens only when there's spare time. Instead, make it an integral part of each employee's role with dedicated hours built into their schedules and utilization rate calculations.

Every team member should have a specific training schedule, tailored to their position and skillset. Whether it's learning new software, enhancing communication skills, or developing leadership capabilities, ongoing education should be built into their routine and reflected in their schedule and time sheets. This formal approach to learning ensures that professional development is not only encouraged but expected as part of their responsibilities.

Actionable Step:

Set clear expectations for training as part of each employee's job description. Schedule time for learning and development into regular work hours, ensuring that team members see this as a priority rather than an optional task.

Training as a standard operating procedure.

Incorporate continual learning into the fabric of your firm's operations. Just like project work, skill development should be treated as a standard operating procedure (SOP). How training is conducted, what courses each role should complete, and what skills are required for each role should be documented and included in your firm's SOP.

This ensures that training is not only prioritized but also consistently delivered across the firm. You want to create a culture where growth is expected, and learning becomes a natural part of the workflow. Encourage your team to bring up new topics they are interested in learning. Have a committee tasked with reviewing the training programs and updating them on an annual basis so they remain effective and relevant.

Actionable Step:

Document the training process as part of your firm's standard operating procedures. Task a group within the firm to document, review, and update the training program on a regular basis.

BEST PRACTICE 07

Automate: Embrace Technology

The rapid advancement of software and technology has transformed the practice of engineering in ways that were unimaginable a few decades ago. From new design tools like BIM, parametric design, and AI to new materials and systems, engineering has been transformed by technology. This extends to how engineers manage their firms with cloud based tools that track time, allow for online invoicing and e-payments, to project management tools that track data and profitability across a firm.

For engineering firms, embracing technology isn't a matter of convenience; it's a competitive necessity. Automation allows your firm to eliminate repetitive tasks, improve accuracy, and free up your team to focus on more valuable work. In this section, we'll explore how automation and technology can help your firm become more efficient, productive, and profitable.

Leverage technology to eliminate menial tasks.

One of the greatest benefits of technology and new software tools is their ability to handle routine, time-consuming tasks that eat into your firm's productivity. Menial tasks like data entry, scheduling, and file management are necessary but often tedious and take up your team's valuable time. By automating these processes, your employees can redirect their energy toward higher-value work—such as client interactions, design thinking, or strategy.

Software tools like project management platforms with integrated accounting software, and scheduling automation can take care of the back-office tasks, ensuring that operations run smoothly without draining your team's time and attention. And new AI tools can help with things like communication, marketing, concept image generation, and more.

Actionable Step:

Identify routine tasks in your firm, such as data entry and scheduling, and research software tools to automate them. Regularly review emerging software, AI, and automation tools to further streamline operations.

Focus on value-add work.

When your team's time is freed from repetitive tasks through automation, they can focus on the work that truly drives value for your clients and translates into revenue for your firm. Whether that's spending more time on design, improving client relationships, or working on new business development, automation allows your team to focus on activities that require creativity, problem-solving, and expertise.

This shift also improves employee engagement and job satisfaction,

Actionable Step:

Use your project management, financial, and time tracking software to analyze what work generates the most revenue and most profit. Identify the lower value tasks

as your team spends less time on mundane tasks and more time contributing to meaningful projects.

Look for the repetitive tasks that can be automated. Search out the things that don't need specialized knowledge and find other ways to complete that work. Think about outsourcing low value efforts and build an internal team of highly skilled, knowledgeable, high-value employees.

and look for ways to automate or outsource that so your team can refocus on the more profitable work.

Achieve more with a smaller, experienced team.

Technology and automation empower your firm to accomplish more with fewer resources. This means you can rely on a smaller, more experienced team to handle most of the work without sacrificing quality or productivity. Automation tools can streamline operations, improve project tracking, and ensure that deadlines are met—all while reducing the need for manual oversight. By automating essential tasks, your team becomes more efficient, allowing you to scale your business without significantly increasing overhead. Couple this with the right pricing strategy and you can see firm profitability skyrocket.

Actionable Step:

Identify tools that can increase productivity of senior employees. Invest in higher skilled employees that can manage software tools and outsourced consultant teams to increase productivity and profitability.



Continually research new tools.

Technology is constantly evolving, and it's essential for your firm to stay ahead of the curve. Continually researching and evaluating new software tools that are relevant to the engineering industry and improve productivity can help you maintain a competitive edge. Whether it's project management platforms, rendering software, cloud-based design tools, or AI, regularly updating your tech stack ensures that your firm is leveraging the best tools available to do the job better and faster.

It is the tech forward firms that are staying on top of the latest software tools and technological advances that are set up for success in the future.

Actionable Step:

Create a committee within your firm that is tasked with researching what new tools are available, annually reviewing your tech stack, and making recommendations on when a new tool is worth adopting. Look at both software and hardware advances.



Analyze tools in terms of increasing productivity, as well as potentially new services you can provide and sell to clients.

Implement software for efficiency and accuracy.

Automation isn't just about saving time; it's about improving accuracy, reducing errors, and improving the quality of your work. Manual processes are prone to mistakes, especially when they involve complex calculations or data entry. Implementing the right software can ensure that your work is not only faster but also more reliable. This is a big value add for your clients.

For example, using BIM (Building Information Modeling) tools for structural design or MEP system layouts can significantly reduce errors while enhancing collaboration across teams and consultants. Clash detection can save time during construction and save clients thousands of dollars. More accurate drawings can make fabrication easier or more precise, saving time and materials. These can be a competitive advantage when pursuing new project opportunities.

Similarly, accounting software can automatically track expenses and manage payroll with precision, reducing the risk of not getting paid for your efforts, or for costly financial mistakes.

Actionable Step:

Review your current software and analyze whether it is the right tool for future growth. Identify areas your use of technology adds value for your clients and craft marketing materials to highlight the benefits and outcomes your use of technology can drive for your ideal customers.

Justify software investment by time savings.

One common concern when adopting new technology is cost. With subscription pricing for most software, it can feel burdensome to adopt too many new tools. However, the time savings that come from automating even small tasks can quickly outweigh the expense.

Saving just one hour of an employee's time each month can more than cover the cost of most software tools. When scaled across an entire team, software could potentially save you thousands of dollars more than its cost. Remember that your employees are by far the biggest expense at your firm. If a software tool can make your people more effective, save even a tiny bit of their time, or improve the outcome of their work it is a huge win for the business.

Whether reducing the time spent on invoicing or streamlining project management, the productivity gains from automation will lead to greater efficiency, ultimately making your firm more profitable.

Actionable Step:

Evaluate software investments by calculating the potential time saved and compare the cost of the tool against the value of time saved. If a tool saves even one hour per employee each month, it can quickly cover its cost and drive profitability.



Outsource certain tasks when beneficial.

Although in-house productivity can be improved through automation, not every task needs to be done within your firm. Certain tasks, such as 3D building scans, energy modeling, or even drafting and BIM modeling, can be outsourced to specialized providers. This has the potential of being more time and cost effective than doing everything in-house.

Outsourcing allows your team to focus on core activities where your expertise is most valuable. By carefully selecting what to automate in-house and what to outsource, your firm can operate with maximum efficiency and flexibility as market conditions or client expectations shift.



Regularly review which tasks should be complete in-house and which are best outsourced for maximum efficiency and profitability.

Actionable Step:

Review your workflow and identify non-core tasks, like drafting or energy modeling, that can be outsourced to specialized providers. Request cost estimates from consultants who provide those services and weight the cost of consultants vs doing the work in house. Consider time costs, software and equipment costs, and what you can charge the clients for those services to make the final decision.

Conclusion

Managing an engineering firm can be challenging, but with the right systems, processes, and mindset, it doesn't have to be chaotic. The strategies outlined in this ebook—designing your business with intention, documenting repeatable processes, hiring the right people, embracing transparency, fostering continuous learning, and leveraging technology—can help you regain control of your firm, reduce stress, and give you back valuable time.

By applying these best practices, you'll create a business that operates smoothly and efficiently, allowing you to focus on what you truly love: solving problems and impacting your community. The shift won't happen overnight, but with consistent effort, you'll start to see the benefits in both your day-to-day operations and long-term success. Your team will function better, your clients will be happier, and ultimately, your firm will thrive.

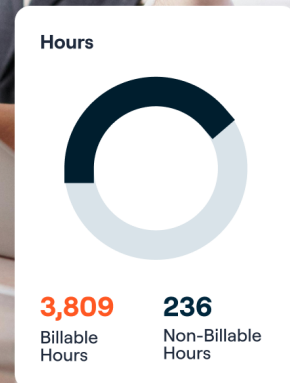
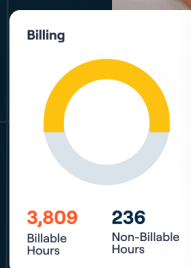
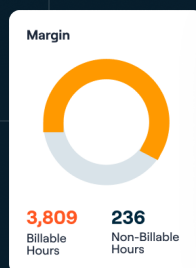
The key to a well-run firm is not about working harder, It's about working smarter. Intentionally designing the way your firm operates will lead to a business that's not only profitable but also rewarding and sustainable. Put these best practices into action and get back to the work that fuels your passion.

About BQE CORE

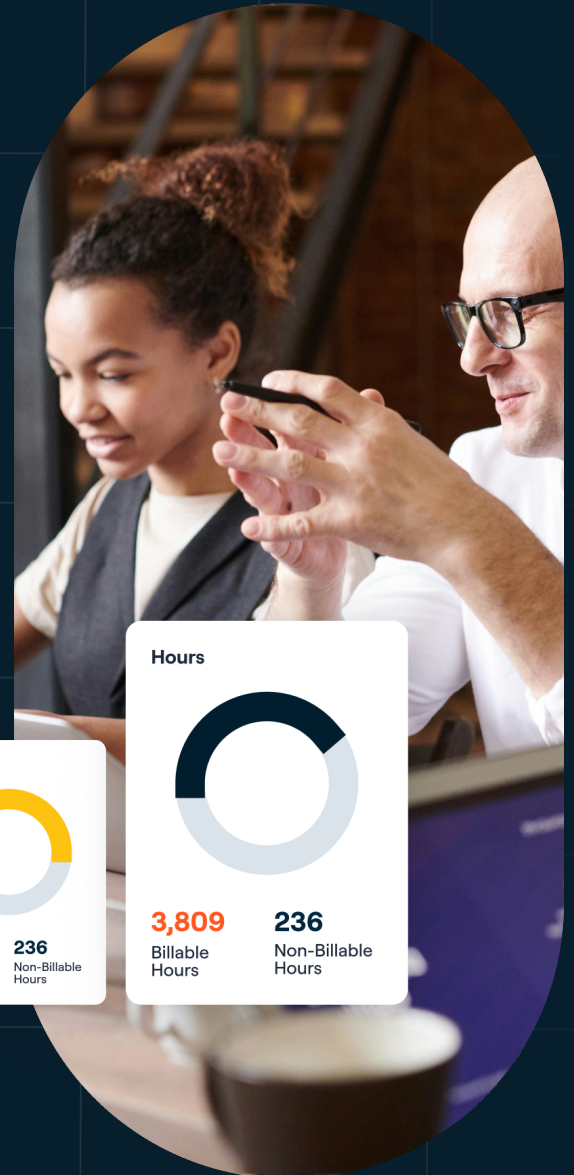
Designed for engineering, architecture, and professional services firms, BQE CORE is a leading provider of business management software.

Firm owners are busy. This is why we built BQE CORE to streamline operations by integrating time tracking, project management, invoicing, and accounting into a single platform, enabling firms to boost productivity and profitability.

With a track record of over 25 years serving the A&E industry, BQE empowers businesses to make informed decisions through real-time insights and powerful analytics, helping them achieve growth and operational excellence.



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Actionable Steps Cheat Sheet

BEST PRACTICE 01

Design: Treat Your Business Like a Design Problem

- ☐ **Actionable Step:** Set aside time each week to focus solely on the business side of your firm. Review financials, think through operational challenges, and develop solutions to test with your team.
- ☐ **Actionable Step:** Choose one business challenge, such as project management, cashflow, or communication. Define the problem with your leadership team, brainstorm solutions, and implement one as a trial. Gather feedback over a month and adjust the solution if necessary. Repeat this process monthly with different firm challenges to continuously improve your operations.
- ☐ **Actionable Step:** Create a strategic plan by defining your firm's mission, vision, and key processes. Outline client engagement, project flow, and communication tools, then document everything in an operations manual. Review with your team to ensure clarity and alignment.
- ☐ **Actionable Step:** Conduct a firm-wide review of all major business components—operations, finances, client management, and staff development. Identify areas for improvement and create a clear strategy for each. Document these strategies and ensure your leadership team develops an action plan for implementation.
- ☐ **Actionable Step:** Schedule regular team meetings, project check-ins, and 1:1 sessions to align everyone with the firm's goals and vision. Ensure each employee understands the firm's mission, values, and objectives.

Actionable Steps Cheat Sheet

BEST PRACTICE 02

Document: Create Repeatable Systems & Processes

- ☐ **Actionable Step:** Develop a list of all areas of your business that can be systematized, including client intake, project management, billing, marketing, and communication.
- ☐ **Actionable Step:** Document all key processes in a centralized, easily accessible location. Ensure the documentation is detailed enough to guide new hires and junior staff, serving as your firm's instruction manual. Regularly update and reference these documents to maintain consistency and quality across the team.
- ☐ **Actionable Step:** Review your Standard Operating Procedures and make sure they are repeatable. Regularly review and refine processes to maintain efficiency and predictability across all projects. Update older processes as you grow your team, adopt new tools, and expand your firm's knowledge base.
- ☐ **Actionable Step:** Track everything you spend your time on over the next week. Take the list and circle all items that could be handled by someone else at the firm. Document the process you want them to follow to achieve the results you expect and delegate that task to the right person.
- ☐ **Actionable Step:** Identify the biggest weaknesses in your team's execution of projects. Pick the most impactful area and find a training opportunity to improve your team's capabilities in that area—turning the weakness into an area of strength. Repeat this on a monthly or quarterly basis.

Actionable Steps Cheat Sheet

BEST PRACTICE 03

Hire: The Right People in the Right Seats

- ☐ **Actionable Step:** Make a list of tasks you are currently doing that can be delegated and develop a plan to hire or assign those responsibilities to the right team members.
- ☐ **Actionable Step:** Define the key roles in your firm (marketing, finance, project management, etc.) and create detailed job descriptions that outline the expertise required for each position.
- ☐ **Actionable Step:** When hiring for non-design roles, actively seek candidates from outside the field. Broaden your search to include professionals who are experts in their discipline, regardless of their familiarity with AEC.
- ☐ **Actionable Step:** Create a standardized hiring process for your firm, including steps for job posting, interviewing, skill assessments, and cultural fit evaluations.
- ☐ **Actionable Step:** Conduct regular evaluations of your team structure to ensure each role is filled by someone with the right expertise. When considering promotions, design a professional development plan for each person promoted to a new role.

Actionable Steps Cheat Sheet

BEST PRACTICE 04

Manage: Transparency, Data, and People

- ☐ **Actionable Step:** Enable permissions in your firm management software so all team members can access key data such as project schedules, fee structures, budgets, and timelines. Use a centralized platform where this information is updated regularly and easily accessible. Communicate to the team how to interpret and use this data for decision-making and self-management.
- ☐ **Actionable Step:** Invest in data visualization tools that offer real-time reporting on project statuses, financials, and KPIs. Set up automations to send the reports to the right people on a set schedule. Conduct training sessions to ensure your team understands how to use data to self-manage and enhance project outcomes.
- ☐ **Actionable Step:** Have every person identify their direct reports and schedule recurring 1:1 meetings with each person. Use these meetings to review progress, address challenges, and provide immediate feedback.
- ☐ **Actionable Step:** Create a professional development program that offers regular training in key areas such as project management, financial literacy, and new industry tools. Make training a requirement for all employees and track their progress to ensure consistent skill development across the firm.

Actionable Steps Cheat Sheet

BEST PRACTICE 05

Communicate: Customer Experience is Key

- ☐ **Actionable Step:** Map out the entire client journey in graphic form, from initial inquiry to project completion. Identify key touchpoints and opportunities to enhance the experience at each stage. Design specific steps to improve communication, responsiveness, and service delivery.
- ☐ **Actionable Step:** Implement a policy of weekly communication with all clients. Use a consistent format for these updates (such as email or a project management platform) to provide status reports, upcoming milestones, and any relevant project developments. Have every project manager send an update to every client every Friday.
- ☐ **Actionable Step:** Provide training to your PMs on effective client communication. Set expectations for weekly updates, and establish check-ins with PMs to ensure they are following through on these habits. Training should include writing skills, presentation skills, and training in the specific systems and processes your firm has established for these tasks.
- ☐ **Actionable Step:** Create a phase-by-phase follow-up system where you check in with clients after each phase is completed. Ask for feedback and explore opportunities to deepen the relationship or course correct if their experience isn't exceptional. Develop a standard process to request testimonials.
- ☐ **Actionable Step:** Develop communication templates and automate reminders for client updates. Use tools like project management software or CRM systems to track communication and ensure consistency across all projects and team members.

Actionable Steps Cheat Sheet

BEST PRACTICE 06

Train: Foster Continual Learning

- ☐ **Actionable Step:** Conduct regular employee evaluations to identify skill gaps and growth opportunities. Ask your employees what additional training they are interested in or what skills they feel they lack. Use this information to design personalized development plans.
- ☐ **Actionable Step:** Develop a quarterly training program that includes workshops, seminars, or online courses. Identify certain programs you want everyone to participate in and identify specific training opportunities relevant for each role at the firm.
- ☐ **Actionable Step:** Set clear expectations for training as part of each employee's job description. Schedule time for learning and development into regular work hours, ensuring that team members see this as a priority rather than an optional task.
- ☐ **Actionable Step:** Document the training process as part of your firm's standard operating procedures. Task a group within the firm to document, review, and update the training program on a regular basis.

Actionable Steps Cheat Sheet

BEST PRACTICE 07

Automate: Embrace Technology

- ☐ **Actionable Step:** Identify routine tasks in your firm, such as data entry and scheduling, and research software tools to automate them. Regularly review emerging software, AI, and automation tools to further streamline operations.
- ☐ **Actionable Step:** Use your project management, financial, and time tracking software to analyze what work generates the most revenue and most profit. Identify the lower value tasks and look for ways to automate or outsource that so your team can refocus on the more profitable work.
- ☐ **Actionable Step:** Identify tools that can increase productivity of senior employees. Invest in higher skilled employees that can manage software tools and outsourced consultant teams to increase productivity and profitability.
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