



Chair's Corner: Training Future Consultants

BY MOHAMMED BILLOO



On November 15 the [IEEE-USA Consultants Committee](#) continued a tradition of in-person training started years ago, introducing and providing insight to young professionals interested in the world of independent consulting. At the event, attendees listened to a variety of presentations and engaged in robust discussions related to:

- How to start your independent consulting practice
- How to set-up and run a profitable business
- How to get clients
- How to incorporate AI into your practice

The training started with me describing my personal consultant journey, outlining how I straddled working a full-time job while starting my independent consulting practice. My fellow committee member **Theresa Brunasso** then discussed how she gained and retained new clients by building a good reputation, continuing to expand her network and making herself easy to find through robust marketing of her company. The third presentation by **Jacob Beningo** was more of a conversation about how to run an effective business with committee members and workshop attendees all sharing insights. **William Kassebaum** closed the workshop with a presentation about moving your consulting practice into an entrepreneurial enterprise and how AI can assist with that transition.

The [IEEE-USA Consultants Committee](#) wants to thank **Sharan Kalwani**, Chair of the IEEE Southeast Michigan Consultants Network for all his work and effort to bring this workshop to Michigan.

2025 Recap

This past year has been very fruitful for the IEEE-USA Consultants Committee. The committee started the year with virtually hosting local consultant network chairs to discuss how this committee could better serve the needs of consultants in their area. We expanded our [IEEE-USA Consultant Fee Survey](#) to include part-time consultants to capture more information about all independent consultants. The committee sponsored a very informative [webinar](#) educating consultants about how AI (artificial intelligence) can be incorporated into their practice. Lastly, closing out the year with the aforementioned in-person workshop where the committee was able to directly interact with members who want to move into the realm of independent consulting in southeast Michigan.

What's Ahead in 2026

In 2026, the committee will be working on plans to upgrade the [IEEE-USA Consultants Finder](#), release a paid webinar series addressing unique issues facing independent consultants and again provide an in-person training so we can have direct access to members looking to enter the field of consulting. ■

2025 IEEE-USA Consultants Fee Survey Report Now Available

Median Rates Charged by Independent Consultants Plateaued in 2025

BY PAUL LIEF ROSENGREN

IEEE-USA has published the [IEEE-USA Consultants Fee Survey Report: 2025 Edition](#). The report is full of useful information if you are thinking of hiring an engineering consultant — or becoming one.

The *IEEE-USA Consultants Fee Report, 2025 Edition* has collected more information on members who earn less than 50 percent of their income from consulting (“partial consultants”), while continuing to report a broad array of data on “full fee-based consultants” (those who earn more than 50 percent of their income from consulting).

The Report showed that rates charged plateaued in 2025 after gains in rates from 2023 to 2024. The median rate charged by full fee-based consultants remained unchanged from 2024-2025. Partial consultants in the 2025 survey median rate was equal to those of full fee-based consultants, though a larger portion charged less (nine percent charged less than \$100 per hour.)

As in the past, rates charged varied, sometimes significantly, by geographic region, education level, business sector, and experience. The report breaks down each area by highest decile, highest quarter, median, lowest quarter, and lowest decile.

The complete *IEEE-USA Consultants Fee Survey Report: 2025 Edition* is available for purchase from the [IEEE-USA Shop](#). The Report is \$29.95 for members; non-members pay \$49.95.

Some of the findings from the report include:

- The areas where most consultants offered services were Systems Engineering (30%); Electrical Power Systems (27%); Python (27%); Technical Writing (27%); and New Product Development (25%)
- Roughly one in five consultants charged \$300 or more an hour, unchanged from last year after rising significantly in 2023

- Full fee-based consultants holding a Ph.D. charged a median hourly rate \$50 higher than all respondents; roughly one in four consultants holds a Ph.D. as their highest degree
- Full fee-based consultants holding an MBA charged a median hourly rate \$20 higher than all respondents; a little over a third of respondents have an MBA
- The advantage of having a Ph.D. to an MBA rises in the highest decile to a \$93 an hour advantage (\$500 an hour for a Ph.D. to \$408 for an MBA)
- There was no reported difference in rates charged by engineers with or without a Professional Engineer (P.E.) license; in the past those with a P.E. charged slightly more (roughly \$10 to \$26 an hour)
- Consultants with office locations in the Mountain region had the highest median rates (\$235); the regions with the lowest median rate charged were the West North Central (\$175), and the West South Central (\$195)
- For partial consultants in the 2025 survey, those with office locations in the South Atlantic region had the highest median rate (\$250) followed by the Pacific region (\$238)
- Four out of five consultants work out of their home office

The survey also presented characteristics that might make you more attractive as a client. Respondents described



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“characteristics they would associate with an ideal client” as those who:

- Pay on time, without reminders, and honor agreed-to terms
- Articulate needs, expectations, and project goals clearly
- Treat consultants with respect, trust their expertise, and maintain ethical standards
- Understand the technical domain or are open to learning
- Manage projects efficiently and maintain professionalism
- Have adequate budgets and financial health
- Encourage collaboration and flexibility in work arrangements
- Offer meaningful projects that are intellectually stimulating
- Match the consultant’s expertise and values

The 2025 report surveyed approximately 9,000 IEEE members who identified themselves as consultants in the IEEE database (down from 12,000 in 2024). The analysis includes responses from 375 full fee-based consultants

and 160 partial consultants. The response rate of 8.7% was the highest of recent surveys.

The survey also asked respondents how IEEE-USA could assist them in their consulting. While the most common response was that they were happy with the level of support provided by IEEE-USA, other frequent responses included:

- Requests for better networking opportunities and increased visibility of consultants
- Assistance in acquiring new clients and promoting services
- Webinars, courses, and training on consulting skills and emerging technologies
- Consultant Directory/Finder improvements (with suggestions such as “Improve visibility of assignments in consultant finder” and “Maintain a searchable expert witness directory”)
- Help with setting competitive consulting rates
- Help with marketing services and building online presence
- Increased awareness of Consultant Committee Services

Renew Your Subscription to the IEEE-USA Consultant Finder

You still have time to renew your subscription for the [IEEE-USA Consultant Finder](#). IEEE Collaboratec powers the IEEE-USA Consultant Finder for independent consultants. This service’s key features include:

- Simple and advanced search features
- An assignment placement portal
- A full consultant profile for paid subscribers

The main purpose of the IEEE-USA Consultant Finder is to let clients, project managers and HR professionals search for consultants to hire — for free!

The IEEE-USA Consultant Finder’s visual design makes it easy to use. It also has web crawlers, so even more

potential clients will be able to find this website — and individual consultant profiles. IEEE-USA is also actively trying to promote this service to professionals through constantly updating Search Engine Optimization (SEO) tags.

All IEEE members considering, or jumping into, the gig economy should check out the IEEE-USA Consultant Finder for marketing their services. This service also includes international independent consultants (those working outside of North America).



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The IEEE membership renewal period is the best, and easiest, time to get started. When you renew your IEEE membership, just add the IEEE Consultants Network Membership Premium to your cart. This step allows your IEEE Collabratec profile to be listed in the IEEE-USA Consultant Finder.

We look forward to your continued support of this product, by subscribing, or renewing your subscription.

Current Membership Premium subscribers — please note: Now is a great time to review your consultant profile. Log in via IEEE Collabratec (or the IEEE Collabratec App) — and consider adding, or updating, your photo; reviewing your biography; and updating your desired salary, or hourly rate. ■



IEEE-USA Webinars Benefiting Consultants

The IEEE-USA Webinar team has conducted a couple recent webinars that consultants may find useful. On December 3, the webinar “[Contracts – Spreading the Risk and Avoiding Killer Contract Clauses](#)” discussed how to successfully negotiate a contract while avoiding typical issues in a poorly drafted contract. And on September 17, the IEEE-USA Consultants Committee sponsored the webinar “[Consultants & AI](#)” where four members of the IEEE-USA Consultants Committee outlined AI’s incorporation into electrical engineering and the diverse ways consultants can use AI in their practice.

How to Find Clients and then How to Say No to Them – Two Blogs from the Freelance Union to Assist Independent Consultants

In the world of consulting, consultants are always looking for and receiving advice about how to get clients. Here

is one of these advice pieces from the Freelance Union Blog “[Stop Relying on Referrals: 3 Simple Shifts That Bring Premium Clients to You.](#)” On the opposite end of the spectrum, sometimes consultants may take on an assignment that in retrospect they should not. In another Freelance Union Blog, they provide a very interesting story “[Shades of No: Understanding Not Just When to Say No, But How.](#)” This is a great read on when and how to turn down that project you know you should not take.

IEEE-USA SmartBrief – Boeing looking to add 1,000 New Workers

In the November 13 issue of IEEE-USA SmartBrief, it highlighted the start of [Boeing’s expansion project](#) for the 787 Dreamliner site in South Carolina. Boeing said it is investing over \$1 billion in the project, which it expects will add 1,000 new jobs over the next five years. Read more interesting stories about policy, innovation and career news in [IEEE-USA SmartBrief.](#) ■



Managing Risk in Electrical Engineering Consulting: A Practical Guide for Modern Engineers

In today's fast-paced, tech-driven world, risk management is becoming one of the most important parts of running a successful electrical engineering practice. Whether you're leading a consulting firm or working independently, smart risk management can save you from headaches, lawsuits, and lost opportunities down the line.

Why Risk Management Matters More Than Ever

Electrical engineers today work at the crossroads of design precision, safety compliance, and emerging technology. That means the risks are higher than ever, from design errors and regulatory changes to cybersecurity threats and project coordination challenges. A single misstep, such as a miscalculated load, a missing clause in a contract, or a miscommunication with another discipline, can lead to costly rework, claims, or worse, safety hazards.

The goal of risk management isn't to avoid all risks (that's impossible), but to understand them, manage them wisely, and build systems that are resilient and reliable. Think of it as designing not just your project, but your entire business to withstand uncertainty.

Common Risks Every Electrical Engineer Faces

Even on everyday projects, exposures lurk in the details:

- **Design Errors or Omissions:** Small miscalculations can cascade into major failures or liability claims.

- **Code and Standards Compliance:** Regulations around energy efficiency, sustainability, and smart systems are evolving constantly.
- **Project Coordination Risks:** Engineers rely on accurate data from architects, contractors, and other consultants and miscommunication can derail timelines.
- **Cybersecurity Threats:** As digital tools and connected systems grow, data security is becoming a serious professional risk.
- **Professional Liability:** Clients depend on your expertise and even small oversights can lead to disputes or negligence claims.

Building a Risk-Smart Culture

Top-performing firms, from leadership to junior staff, understand that identifying and managing risks early is just good engineering. That mindset starts with this proactive framework:

- **Be Selective About Projects and Clients**
Not every opportunity is worth the risk. Use a formal review process to evaluate potential projects before saying yes. If a client or scope feels off, trust your instincts. Sometimes walking away is the smartest move.
- **Define the Scope Clearly**
Misunderstandings fuel many disputes. Spell

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out what you will and won't do in writing. Clearly distinguish basic, additional, and excluded services in every contract.

- **Always Put It in Writing**

Never start work without a signed agreement. A good contract not only protects you legally but also sets expectations and outlines responsibilities, deliverables, and insurance requirements.

- **Keep Quality at the Core**

Establish internal peer reviews, design validation, and documentation protocols to catch mistakes early. Quality control isn't bureaucracy; it's protection.

- **Stay Educated and Compliant**

Codes and standards change fast. Make continuing education and periodic compliance audits part of your routine to stay ahead.

- **Communicate Early and Often**

Clients appreciate transparency. Regular updates and candid conversations can prevent misunderstandings before they turn into formal disputes.

- **Manage Documents Like a Pro**

Organized project files and a consistent document retention policy are your best defense if a claim ever arises. Keep everything from emails to sketches well-archived.

- **Understand Your Insurance**

Make sure your professional liability coverage matches your exposure. If you hire subconsultants, confirm they carry their own appropriate insurance.

- **Protect Your Digital Assets**

Secure your design software, encrypt client data, and have clear cybersecurity policies, especially if your team works remotely.

- **Draw Clear Lines on Safety Oversight**

Jobsite safety belongs to the contractor, not the consultant. If you see a hazard, report it factually and in writing, but avoid assuming responsibility for site safety.

Turning Risk Management into an Advantage

Strong risk management doesn't just protect you; it sets you apart. Clients notice when you run projects smoothly, communicate clearly, and operate with professionalism and foresight. It signals reliability, integrity, and technical excellence; all qualities that strengthen your reputation and your business.

In an industry that's becoming more interconnected and tech-driven every day, managing risk isn't a side task, it's part of your value proposition. The best firms know that success isn't just about designing systems that work; it's about building relationships and businesses that last.

In today's engineering world, having Professional Liability Insurance as a risk management tool isn't just a safety net, it's a business essential. It helps safeguard your financial future, maintains your professional reputation, and ensures that you're prepared for the unexpected. While it may seem like an added expense, the peace of mind and the protection it provides is invaluable when navigating the challenges and responsibilities of the engineering profession.

If you're not already covered, it's time to seriously consider it. Speak with an insurance professional to assess your needs and find the right policy for your business. After all, protecting your work is as important as the work itself. Additional resources can be found in the IEEE [Risk Management Hub](#). ■