



Problems Solved

A compendium of case studies of issues solved by the collective intelligence of SCTC members.

We're the premier professional organization for Independent Technology Consultants.

Our consultant members are leaders in the industry, able to provide best of breed professional services in a wide array of technologies. Every consultant member commits annually to a strict [Code of Ethics](#), ensuring they work for the client benefit only and do not receive financial compensation from vendors and service providers.

As member of the SCTC, our consultants share in ongoing knowledge exchange and often partner on projects where the complexities of the challenge benefit from the power of the experience of the group.

And collaboration does not end with the consultant members. SCTC membership is extended to vendors from related industries who form the Vendor Advisory Council. These vendors provide unique insights into industry trends and solutions through webinars, panel discussions and one on one discussions with the consultants.

The “collective intelligence” of this group of thought leaders has been harnessed to solve some of the most complex customer challenges, just a few of which are outlined in this guide.

If you are an independent consultant or a business with a technology challenge, contact the SCTC for more information on how you can participate in this vibrant community.

Phone 518-254-8024

Toll-Free 800-782-7670

When Should You Hire a Consultant?

Technology projects don't always go well. When they don't, users are frustrated and managers look bad. Nobody wants this to happen. As we are all asked to do more, with fewer resources, it's harder to ensure success. Here are some questions to consider before embarking on your next project:

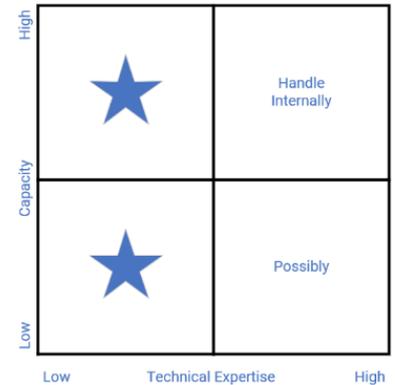
Can I handle this project successfully with in-house resources?

Most organizations have staff members who are experts at keeping the current environment running. But the acquisition of new technology takes a different skill set, and different knowledge, that often does not exist within an organization.

- Is your staff current on the marketplace?
- Do they know what capabilities are available?
- Are they familiar with the strengths of various vendors, and where their roadmaps are headed?
- What about pricing models and current market rates?

You may want to consider bringing in outside expertise if your staff is not proficient in these areas.

Equally important is the existing work load of your team. Even if your staff has the technical expertise required, they need time to devote to another project. If your staff is already working at or near capacity, they may not be able to add to their workload. An outside expert who is dedicated to moving the project along can relieve a lot of stress.



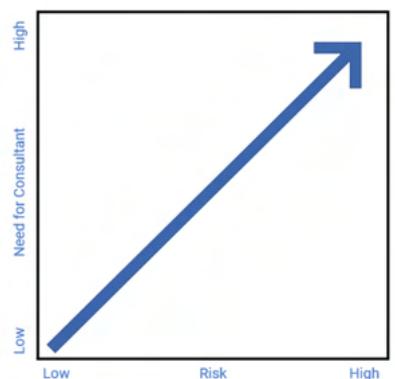
How can this project make me look good?

A well-executed project will certainly enhance your professional reputation. Are you confident that your internal staff can devote the attention necessary to accomplish that? Or would it be better to use an external resource who is focused on the project and not distracted by other duties?

What are the risks for this project?

You can mitigate the risk with guidance from an expert who has worked on similar projects, is up to date on the technology, and knows how to avoid common pitfalls.

If outside expertise sounds like a good idea, how do you find a guide you can trust? The Society of Communication Technology Consultants (SCTC) is an association of independent consultants who are vetted for independence and experience. Members must meet requirements for experience in the industry, provide references, and agree to uphold the ethical and professional standards of the SCTC. The screening process is thorough. Not every applicant is admitted. In an industry without certifications for expertise or credibility, you can be sure that SCTC members have met rigorous requirements.



5 Things to Look For in a Consultant

Are they vendor agnostic?

Consultants are in a unique field. For technology consultants, there are no certifications required to establish expertise or credibility. Anyone can claim to be a consultant. In fact, many vendors have employees who have “consultant” somewhere in their job title, and they may actually provide advice to customers. And they may be vendor agnostic—among the products that they provide. But they are certainly not going to recommend a product outside of their portfolio. Do you want your choices to be limited?

Do they receive resale or vendor compensation?

Underneath it all, many “consultants” are typically in some type of sales role where their true job is to get you to spend (more) money with their company. In most instances, there is some sort of compensation or reward for a successful effort.

Do they have any conflicts of interest?

- Are they representing you, and recommending the best solution for you?
- Or are their recommendations limited to the products that are sold by their company?
- Are they recommending the solution that pays them the highest commission?

Have they signed a strict code of ethics?

Have they demonstrated their commitment to high ethical standards by signing a code of ethics?

Are they experienced?

You want a consultant who has worked on similar projects, is up to date on the technology, and knows how to avoid common pitfalls.

How do you find consultants who meet your criteria?

The Society of Communication Technology Consultants (SCTC) is an association of independent consultants who are vetted for independence and experience. Members must meet requirements for experience in the industry, provide references, and agree to uphold the ethical and professional standards of the SCTC. The screening process is thorough. Not every applicant is admitted. We’ve done the work for you. In an industry without certifications for expertise or credibility, you can be sure that SCTC members have met rigorous requirements.



Identifying Unused Utilities to Deliver Big Savings

Challenge

Many organizations have amassed an inventory of phone numbers that they have acquired over many years, often decades, without a corresponding inventory of what they have and the utility, or lack thereof, of each number. Without knowing what they do, most organizations take the route of adding new phone lines rather than re-assigning existing lines and very rarely ever disconnect or shut them down for fear of shutting down something that is required for a critical service or operation. The pandemic has even further exacerbated this issue with many organizations moving to remote work, but still having hard lines that terminate at employee desks/offices. Our client was a government agency which faced this issue.

Solutions Overview

By leveraging [Aizan's broadcasting and IVR services](#), we were able to phone each of the lines within their identified portfolio and identified which lines were currently still being used. This is done first via the CDR provided on the numbers dialed, which shows lines that are active, inactive, not in service, or are a fax line. For the lines that were active, an IVR played a message for those that answered the phone, prompting the employee to confirm that this was an active line.

Key Results

700 Unused phone lines shut down, delivering significant ongoing savings.

A final report of the findings was delivered to the client that provided them with the information they needed to confidently identify phone lines that are no longer in use and shut them down. The result of this exercise was a reduction of over 700 phone lines, delivering significant ongoing savings associated with dormant telephone lines.



Roberta Fox from **FOX GROUP Technology**

FOX GROUP Technology: Technology Strategy, Architecture, Design and Procurement Services in NG9-1-1, Unified Communications, Telecommunications, Contact Centres and Networking

[foxgroup.ca](https://www.foxgroup.ca)

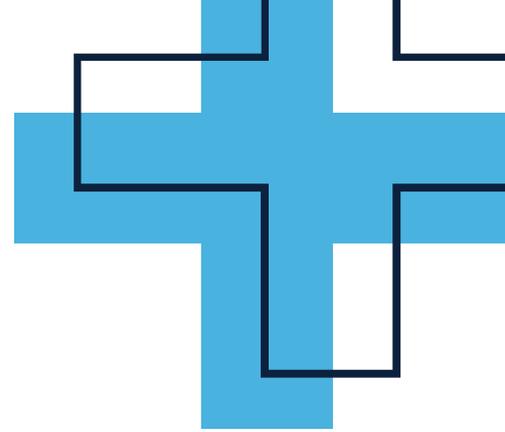
roberta.fox@foxgroup.ca



connecting anyone to anything™

Featured in this case study, SCTC VAC Member

Making a Senior Living Facility E911 Compliant



Challenge

Our firm was asked to complete a conversion of voice services for a sprawling senior living facility with over 20 different residential structures on a single campus. During the conversion, we discovered that the site was not compliant with the relatively new E911 laws, specifically, Kari's Law and RAY BAUM's Act. We immediately offered to mitigate this situation with our E911 compliance consulting expertise.

Solutions Overview

The solution included working with both their phone system vendor and voice service carrier to make the necessary changes for full compliance.

- 01** We enabled staff and residents to reach a 911 call centre by being able to directly dial 911, without any outside line code (such as dialling a "9" before the number).
- 02** We added simultaneous alerts, using features on the phone system to let management know immediately that someone on campus has dialled 911, and from exactly which device did they place the call.
- 03** We registered the exact location of each device with the voice carrier, including the legal address of the appropriate building, plus the floor and office/unit number as well.

Key Results

The staff and residents are now safer. Calls to 911 reach the local 911 center no matter how they are dialed. The facility's management team sees phone system button lights immediately when someone dials 911, and their display tells them who made that call. Plus, they get an email with the date, time, and caller location for their records.

Best of all, response times are faster. Before this project, first responders had to go to the main building in order to find out where the caller was located. This created a significant delay in getting to the caller. Now, first responders go directly to the right building, floor, and unit/office and are able to provide care faster.

In addition, we trained the site staff on how to remain compliant as residents and staff move around the campus. This ensures that the facility will not be liable for fines or penalties due to non-compliance.



Bobra Bush from **Telcom Corporation**

Telcom specializes in providing telecommunications consulting to the Senior Living Industry, working with owners of Assisted, Independent, and Skilled Nursing facilities to reduce costs while improving staff efficiency and E911 compliance.

telcomcorp.com

bsbush@telcomcorp.com

Reducing Billing Errors with the Right Billing Procedures

Challenge

Communications technology billing for fixed-line services can be complex and frequently results in billing errors. If not caught these errors can cost organizations thousands of dollars over the life of the service.

Solutions Overview

Many billing errors result from a haphazard order process. We help our clients to implement the proper ordering procedures that can minimize billing errors.

One common error is that you disconnect a service, but it continues to bill. We help clients create a process to confirm that billing has stopped for each order. Often a service has multiple billing components, sometimes under different account numbers. We help clients ensure that all components of a disconnected service have stopped billing.

When new contracts with new rates are negotiated, it is common that the new contract rates are not reflected in the bills. We work with clients to ensure that the correct contract rates are actually billing. We have found that providing vendors with accurate and complete documentation (account number and relevant contracts already in place) when placing orders is essential to avoiding long term billing errors. We also require vendors to provide evidence that billing is correct.

Different vendors have different ordering procedures. We make sure our clients are clear on how their specific vendors need to receive orders. For example, signed order forms are better than informal emails. We also consider the type of order, since a disconnect order may have a different procedure than an upgrade or order for new service. We also put processes in place to monitor invoices to ensure that the correct rates continue to be billed.

Key Results

- 01 Fewer billing errors
- 02 Discovering errors as soon as they crop up. (Most communications service providers limit the window for disputing billing errors to a few months. Once beyond this limit, customers cannot claim a refund if billing is incorrect.)
- 03 More organized ordering process understood by all involved parties in the organization whether they are responsible for contracts, orders, billing or maintaining vendor relationships.



Jane Laino from Digby 4 Group, Inc.

Digby 4 Group, Inc. helps clients manage communications technology including expenses, contracts and inventory for fixed, mobile and cloud services. We are based in New York City and typically have long-term relationships with our clients, some spanning over 30 years. Our website is www.digby4.com. President Jane Laino can be reached at 212-883-1191 or jane.laino@digby4.com.

Solving a Complex SIP Call Flow Problem

Challenge

The client had decided to migrate from an old inhouse ACD platform to a modern cloud-based call center solution. The business insisted on maintaining the existing IRV and integrating it with the new cloud-based contact center platform. The new solution was designed, and User Acceptance Testing (UAT) began. This is when a huge problem arose. The telecom team discovered that calls were not behaving as expected. This brought the implementation to a standstill until a solution could be found. The roll out of the new solution was in jeopardy.

Solutions Overview

CTG Integration analyzed the problem, and found that the call center vendor was using a SIP carrier that could not accommodate the needed SIP refer and header manipulation.

We brought in a SIP provider that we thought capable to accommodate the call flow and header manipulation. We set up a Bring Your Own Carrier (BYOC) trunk group with the call center cloud provider and within a few hours of working with our integrator and the new SIP provider, we were able to establish the call flow and successfully complete calls as needed for the implementation of the solution.

Once the solution was in place, we moved calls to the new carrier.

Key Results

Bringing in the replacement carrier solved the somewhat complex SIP call flow problem. In addition, it provided with customer with their own portal to orchestrate and control their SIP trunking to the Public Switched Telephone Network (PSTN). It also gave them a more resilient environment with multiple carriers to interconnect with, because the SIP orchestrator was connected to multiple carriers and was carrier agnostic. Finally, they saved money. The usage fees also ended up being nearly 30% less than charges from the cloud-based call center carrier they were previously using.

Once UAT was successful, they went live with a successful launch. They have continued to utilize this configuration and their business has grown substantially.

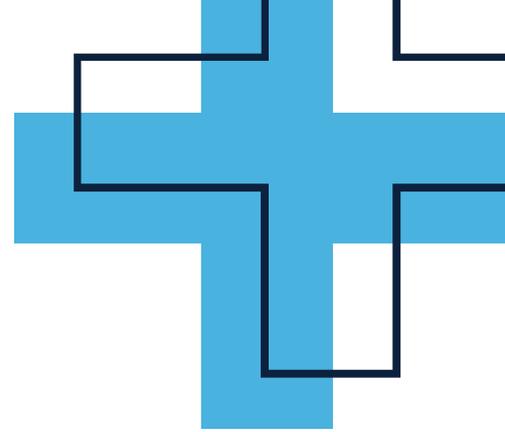


Nick Calautti from **CTG Integration, subsidiary of Calautti Enterprise, LLC**

CTG Integration is comprised of seasoned engineers, executive technical management and senior project management. CTG can help guide you through the complexities of planning and architecting your migration to ensure a smooth transition that meets your company's needs, objectives and goals to ensure your system can evolve as you evolve. Over the years CGT has been faced with extreme integrations problems to solve, adopting today's technology to legacy systems, interfacing seamlessly with OSS and BSS platforms. Forklifting old technology while not disrupting your business in a negative way. These are just a few of today's challenges.

✉ ncalautti@ctgintegration.com

Updating an Outdated Phone System



Challenge

The existing phone system serving 2500 users at 9 locations had reached end of life and upgrades were not economically feasible. Ongoing maintenance expenses were high, parts were difficult to find, and fewer technicians had the knowledge to work on the old system. The digital technology that the system was based on was outdated and limited the capabilities available to the users.

Solutions Overview

Swartz Consulting performed an in-depth needs analysis, meeting with key stakeholders and department representatives. In addition, there was an assessment with the technical team to determine the best architecture (premise vs. cloud) to meet future needs. Users were surveyed on their use of the phone system and the importance of the phones to their ability to perform their job functions. The needs of mobile users, and those who work in multiple locations, were also examined. A selection committee was formed to validate the findings of the needs assessment, and regular meetings were held to keep members informed of the progress of the project.

Working with the client's procurement department, an RFP was created and issued, detailing the requirements for a replacement phone system. Responses were evaluated and discussed with the selection committee. With their input, the top three proposers were invited to provide in-depth presentations. The selection committee chose the winning provider, through a discussion facilitated by Swartz Consulting and using technical assessment information also provided by Swartz Consulting.

Key Results

The new solution was installed while staff were working remotely during the COVID outbreak. The new technology greatly facilitated the ability of users to work remotely and still maintain effectiveness. This would not have been the case with the old system.

Other benefits include cost reduction, and a single platform to maintain and administer for unified communications.

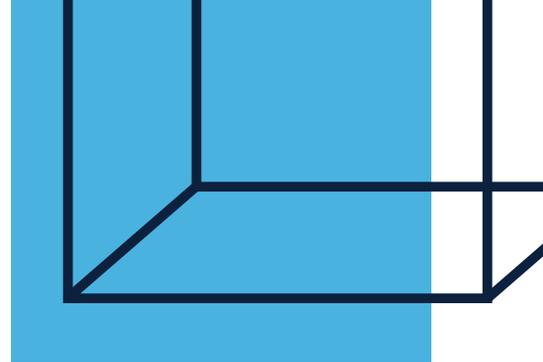


Melissa Swartz from [Swartz Consulting, LLC](#)

Swartz Consulting, LLC offers completely independent vendor agnostic technology consulting to guide clients in selecting and implementing the best solutions for their individual needs. Specialties include VOIP, Contact Centers, Cloud and UCaaS, Premise, Project Management, Unified Communications, RFP creation and consulting.

Melissa Swartz is a No Jitter blogger, regular speaker at [Enterprise Connect](#), a member of the elite [UC Strategies](#) experts team, and past president of the Society of Communication Technology Consultants.

Bringing Fibre to the Home (FTTH) in Rural Spain



Challenge

Our client, a digital infrastructures investment fund, needed to find projects to invest in according to the requirements provided by their investors (European development banks): deploy data centers, 5G, and fiber optic networks in unserved or underserved regions with a wholesale business model. These networks must fuel the economic development of these areas.

Solutions Overview

In rural areas of northwest Spain, many residents did not have internet access. This limited their ability to participate in many areas of the economy fully. There were limitations on education, work opportunities, and much more. The lack of digital infrastructure in an area always limits business development and investment.

Argelich Networks identified the opportunity, located a management and project promoters' team, and participated in a project to deploy fiber to the home (FTTH) to rural 400,000 homes in Galicia funded by CEBF (Connecting Europe Broadband Fund). We supported negotiations between the fund and the project's promoters. We applied our deep European telecom market knowledge and skills as mediators, mentors, and negotiators and played a critical role in the project's success.

Key Results

CEBF invested 45M€ to deploy a FTTH (fiber to the home) network to serve 400,000 homes in rural areas of northwest Spain (Galicia). Now residents have reliable internet access and the barriers to education, work opportunities, and business development have been eliminated.



Agustin Argelich from **ARGELICH NETWORKS**

Argelich Networks is an international and independent consulting and engineering boutique specialized in advising companies and governments in how to enjoy and deploy the most advanced solutions in information and telecommunications technologies.

An Award-Winning Solution for Suicide Prevention & Support Distress Center Agencies

Challenge

How to design, build and manage an affordable shared hosted voice, text and chat contact center solution integrated with separate hosted CRM client management solution for separate coast to coast to coast suicide prevention and support distress center agencies across Canada.

Solutions Overview

FOX GROUP selected multiple vendors for the various elements required for end-to-end web-based private cloud hosted contact center environment. Rogers was the national telecom provider to design, build and manage a private cloud Genesys platform and provide 800 and network services. iCarol provided the web-based distress center CRM solution. Impact Mobile was selected as the SMS aggregator. Other small local vendors provided web hosting, local PC and network support depending on the location. The FOX GROUP team of five experienced technology professionals provided the technical design, integration, project management, and training support. Roberta Fox provided the senior management leadership to the Executive Director and Board as founding CEO/CTO for a period of 12 months assisting in the formation and management of the non-profit corporation and its team.

Key Results

The enterprise class solution provided the members with omni-channel reporting and management information that had not previously been available as separate small on-site contact centers. The award-winning solution also had highly availability solution with 24x7x365 support with usage-based pricing geared to the number of active call takers which reduced the ongoing technology operating costs. The solution was able to not only support the founding distress center requirements, but was able to quickly expand by over 700 agents working remote providing suicide support during the initial days of COVID-19. The environment has since expanded to also support additional mental health national organizations as a shared service model.



Roberta Fox from FOX GROUP Technology

FOX GROUP Technology provides technology strategy, management and procurement support to public safety, distress sector and health care organizations in Canada

Uncovering \$200k in Fee Savings

Challenge

The Client was unaware that they may be eligible for a Federal Fee exemption, and were overspending by \$200k a year.

Solutions Overview

We had to identify if the client was eligible for the exemption. In this case, they were.

We had to document the justification for the exemption.

Third (and the biggest challenge) was working through the vendor's roadblocks and objections. This exemption is obscure and poorly understood. Claiming this exemption usually requires working through various layers of the vendor's bureaucracy and continually refusing to take "No" for an answer. The keys to success included a steadfast knowledge of arcane government issues, a historical perspective, continued persistence, and time.

Key Results

The client is saving over \$200,000 a year.



Art Yonemoto from Yonemoto & Associates

Yonemoto & Associates is a consulting firm helping clients "Following the Money (to save money)" and "Connect the Dots (Perspective & Strategy)"

[yonemotoassociates.com](https://www.yonemotoassociates.com)

ayonemoto@yonemotoassociates.com

Helping a University Port Numbers and Reduce Costs

Challenge

After purchasing a UCaaS platform, a university was having trouble porting numbers from Centrex to the new carrier. In addition, staff constraints exacerbated the issue causing significant project delays. The small staff simply didn't have time to handle their daily work load and solve the problems with the number porting and handle the implementation of the new UCaaS solution. The high Centrex costs continued to accrue, and the new vendor was anxious to start billing for the new platform.

Solutions Overview

Communication Strategies was engaged and took the lead on working through the porting challenges. We also managed the gathering of the configuration information needed for the new UCaaS solution. The project was 100% completed in May of 2023 with all Centrex service cancelled.

Key Results

Successful deployment with our staff augmentation and a significant reduction in monthly operating costs.



Chuck Vondra from Communication Strategies

Communication Strategies is 35 + year old technology consulting firm.

[com-strat.com](https://www.com-strat.com)

chuck@com-strat.com



Featured in this case study,
SCTC VAC Member

