THE C-SUITE'S GUIDE

DRIVING GROWTH WITH TECHNOLOGY

THE BENEFITS OF ADOPTING A PROACTIVE, STRATEGIC TECHNOLOGY APPROACH AND ROADMAP
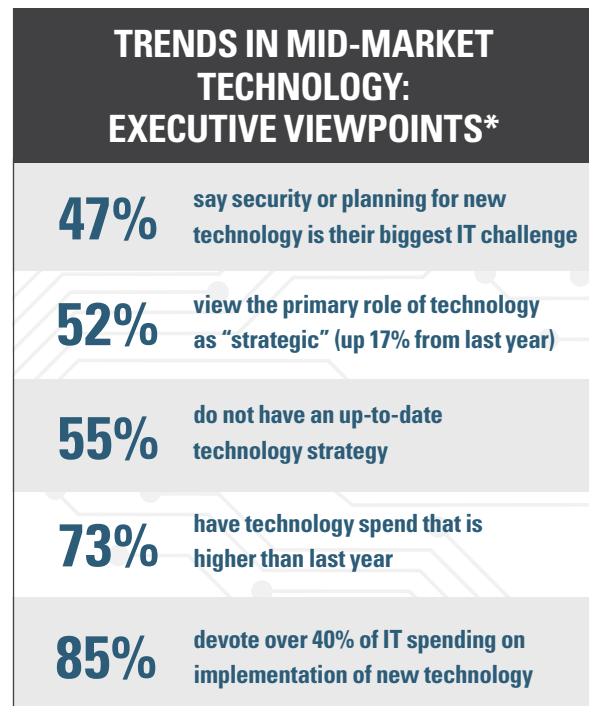
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Introduction

If your business is growing, chances are your technology plans are at a crossroads.

On one hand, your technology agenda is maturing, presenting opportunities to improve productivity, business processes, competitiveness, customer conversions, and more. On the other hand, you face a wide array of barriers to realizing these opportunities.

You're not alone.

According to a recent OnResearch [survey](#) of 500 mid-market executives, organizations across the U.S. face mounting technology challenges, most notably:

- Information security issues

- A lack of sufficient internal skill sets

- Tactical hurdles

- Struggles in determining the proper ROI of IT investments

- Difficulties in identifying and implementing best-suited solutions

TRENDS IN MID-MARKET TECHNOLOGY: EXECUTIVE VIEWPOINTS*

47%	say security or planning for new technology is their biggest IT challenge
52%	view the primary role of technology as "strategic" (up 17% from last year)
55%	do not have an up-to-date technology strategy
73%	have technology spend that is higher than last year
85%	devote over 40% of IT spending on implementation of new technology

*Sources: 2016 OnResearch/Deloitte Technology in the Mid-Market [Study](#); 2016 NetDiligence Annual Middle Market Cyber Claims [Study](#)

In addition, the importance of overcoming these challenges is growing—the result of technology shifting from a critical expense to a competitive necessity. No longer is the focus on maintaining IT systems. Instead, it's on strategic planning, implementing proactive solutions as a key to long-term success.

In fact, more than half of mid-market executives view the primary role of technology as "strategic"—up from 35 percent just last year, according to the survey. As executives have discovered, technology is now an essential component in meeting nearly every modern financial, operational, and competitive goal.

To ensure a foundation for your company's success, you must not only overcome existing IT challenges, but also embrace a proactive view of technology for the future—where it will play a greater role in all aspects of your business. You need the right tools, the right planning, and the right mindset. You need a roadmap.

> *Today, technology is as ubiquitous as electricity. If organizations want to be successful, they must leverage technology in the most opportunistic way. It starts with having a conversation about business value and goals, and then determining how technology fits into each organization's critical path to success.*
>
> –Jeff Bathurst
> Director of Technology Advisory Services
> SC&H Group

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Technology
Roadmaps:
The Basics

A technology roadmap is the essential tool for the continued success of today's growing and evolving organizations. But, what exactly is a technology roadmap, and why is having one so important for your organization?

Let's find out.

The Purpose, Value, and Components of a Technology Roadmap

A technology roadmap is a strategic plan that matches specific, scalable technology solutions with your organization's short- and long-term goals.

Developed via an assessment of your existing IT setup—through the lens of five key organizational pillars (people, processes, technology, business goals, and financials)—a roadmap can yield numerous benefits, including:

✓ Identify opportunities to plan for and invest in technology solutions that deliver the best value

✓ Fully align technology solutions to support your core business goals

✓ Implement business IT solutions that serve your executive vision

✓ Identify and address IT security issues

✓ Develop clear IT strategies for achieving longstanding business success

Based upon your people, processes, technology, business goals, and financials, a technology roadmap serves as a strategic plan—matching your organization with specific, scalable solutions.

Understanding the Impact of an Effective Roadmap:
The Example of Cloud Computing

Consider solutions that incorporate cloud computing, the technology trend executives see as most likely to generate productivity gains, according to the OnResearch survey.

You may have explored some cloud-based solutions, and are confident they can enhance your operations while delivering substantial cost savings. They may even deliver a valuable competitive advantage.

But, here's the catch: If your company is like most, it may not have the internal staff IT resources with the availability, expertise, and/or strategic insight needed to effectively:

Evaluate the array of available cloud-based solutions	**Determine their appropriateness to your organization**	**Plan for seamless implementation**

You're left without a true technology roadmap.

Conversely, suppose a specialized technology advisor assesses your organization's objectives and current IT setup, and as a result, they develop a roadmap to achieve growth and cost-saving goals. Working together, the advisor and you develop a comprehensive strategy to ensure the solution accommodates future opportunities and aligns with your organization's culture and practices.

Based on the roadmap, the advisor assists your organization in:

Transitioning from on-premise software to cloud-based solutions

Unlocking new business opportunities and closing gaps

Improving company flexibility, performance, and response time

Engaging experts on an ad-hoc or ongoing basis

Expanding disaster recovery / continuity of business plans

Managing vendors and contracts

Signs Your Organization Needs a New or Improved Roadmap

There are many scenarios that signal it's the right time to develop a new or improved technology roadmap. Following are some of the most common.

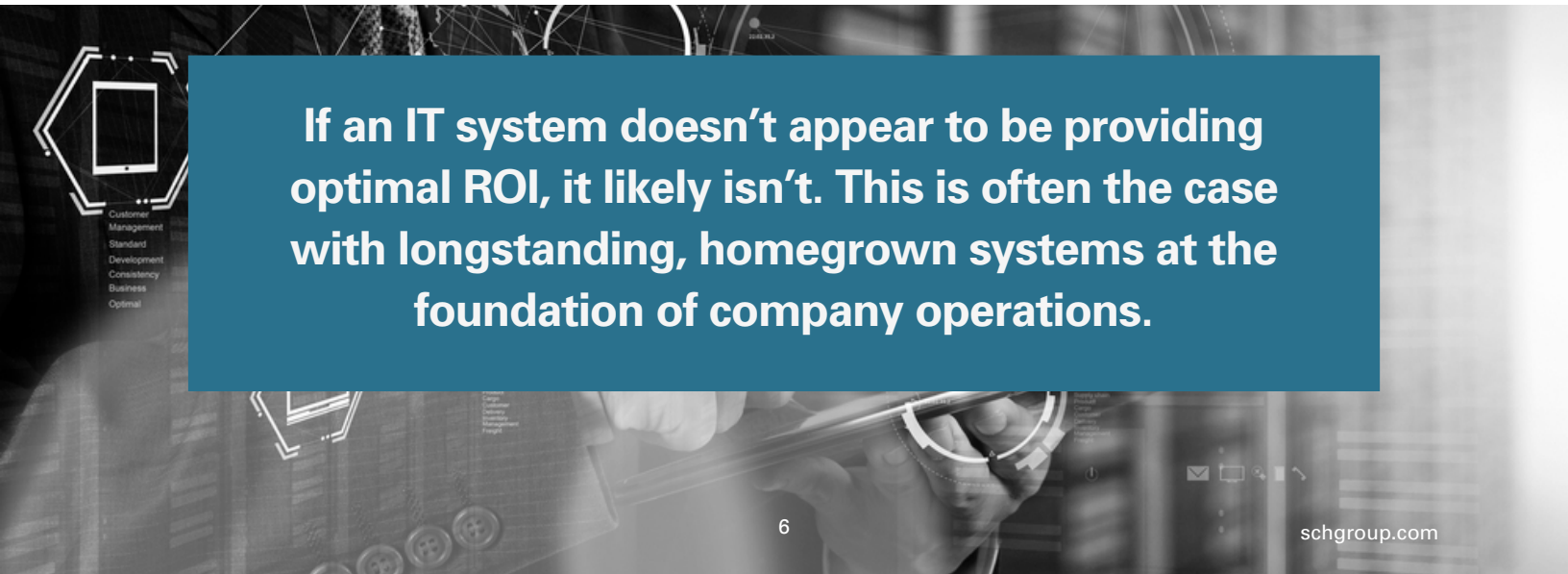## A process or staff position is not functioning properly.

These signs may range from the overt, such as frequent receipt of spam email or slow network connections, to the less evident, such as employees performing tasks not aligned with their job descriptions.

New technology is available that your organization wants to utilize.

You or other company executives may become aware of a technology solution that could benefit the organization, but are unsure how to proceed with evaluation, planning, implementation, adoption, and optimization.

Your existing technology doesn't seem to be delivering the necessary value.

For example, many executives correctly sense that their organization has shortcomings in its technology related to business development efforts. Firms need an efficient, uniform way to track business development activities, but the challenge with many customer relationship management (CRM) solutions is that while management understands they need to use it, the software being used does not align with the company's culture.

> **If an IT system doesn't appear to be providing optimal ROI, it likely isn't. This is often the case with longstanding, homegrown systems at the foundation of company operations.**

Your organization has objectives that require technology solutions, but you're not certain how to get there.

Technology is a key component in nearly every modern corporate function. So, when striving to reach a goal—such as reducing costs, improving productivity, or bridging a gap in competition—technology is almost certain to be at the heart of the solution.

However, you may not know exactly what technology is best suited for the situation and your organization, or you may have already invested in a solution that is falling short of expectations.

Further, your IT resources may not have the technical bandwidth or strategic background to integrate new technologies with legacy systems, as well as manage the broad array of technology, training, and adoption initiatives necessary to achieve corporate goals. A 2017 Gartner CIO survey found that a lack of "skills/resources" is the top barrier companies face in achieving technology objectives.

> **With the complexity and rapidly changing landscape of technology solutions, it is no surprise that a lack of "skills/resources" is the top barrier companies face in achieving technology objectives, according to a 2017 Gartner CIO survey.**

Technology solutions have become exceedingly complex, and with new products and services entering the market at such a rapid pace, few companies have the capacity to analyze the technology landscape and identify:

Which solution to implement	Why it's important	How it will add to overall profitability

For example, in the real estate and construction industries, the use of augmented reality (AR) and virtual reality (VR) has become a competitive differentiator, allowing for an enhanced customer experience. Yet, while many real estate and construction companies desire to close this gap in competition, often they lack the resources to implement and operationally run such advanced technology.

Your organization takes a reactionary approach to technology.

While a proactive, strategic view of technology is key to achieving corporate goals, your organization may be hesitant to shift from a traditional, reactionary approach.

This scenario is often reflected in various misconceptions, such as that technology investment is a valuable option, not an essential expense. In reality, technology is crucial for success—and most of your competitors know it. In fact, more than 90 percent of mid-market executives are now "leading the charge" or "actively engaged" in adopting emerging technologies, and 73 percent of companies have increased their technology spend this year, according to the OnResearch survey.

Another common C-suite misconception—and sign that you need a technology roadmap—is that technology is more important for your operations than it is to your customers. In truth, while technology has long been essential to optimizing performance and savings, it is now an increasingly vital component to meeting customer expectations and building trust.

Across nearly every industry, today's customers want to engage with companies in more meaningful ways. As a result, one of the top emerging IT trends is the use of technology to shift the company-customer relationship from provider to partner, according to a 2017 Accenture report. While most mid-market companies are already collecting customer data to target specific customers and influence behavior, top performers are implementing solutions that use this data to deliver a better service and develop closer relationships.

Change may be on the horizon.

All companies are in constant flux, but when significant events approach,
a technology roadmap is critical to achieving success.

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MERGERS & ACQUISITIONS	In the case of a merger or acquisition, data security and other complex technology issues must be addressed throughout initial due diligence, prior to a definitive agreement, and after signing a definitive agreement. With the pressure to close deals quickly, information risk management may be overlooked, possibly leading to costly data breaches.
MOVING SITES	If your company is moving physical locations, IT challenges far exceed basic network and connectivity issues. For instance, without proper planning, relocating legacy technology systems can disrupt business and result in data loss or exposure, system failures, and reductions in employee productivity. A comprehensive roadmap, which includes a full system and data inventory, thorough network diagram, and detailed project plan, can help minimize risks related to data security and system backups.

LOSS OF STAFF	It is common to lose institutional knowledge when an IT staff member, or other employee involved in technology decisions and operations, leaves your company. A technology roadmap can help minimize the impact of this loss by ensuring redundancy, optimizing the IT staff structure, and/or shifting from in-house solutions to cloud-based applications or outsourced providers.
RAPID BUSINESS GROWTH	In the case of significant business growth, your company may quickly outgrow in-house solutions and require a higher level of IT strategy expertise or experience than is financially viable. For example, to meet customer and operational demands, you may need ongoing CIO-level strategic guidance to bring predictability and structure to your technology projects.

A well-constructed roadmap may not only identify and align solutions to meet your changing needs, but also incorporate part-time, outsourced IT leadership to ensure optimum technology performance.
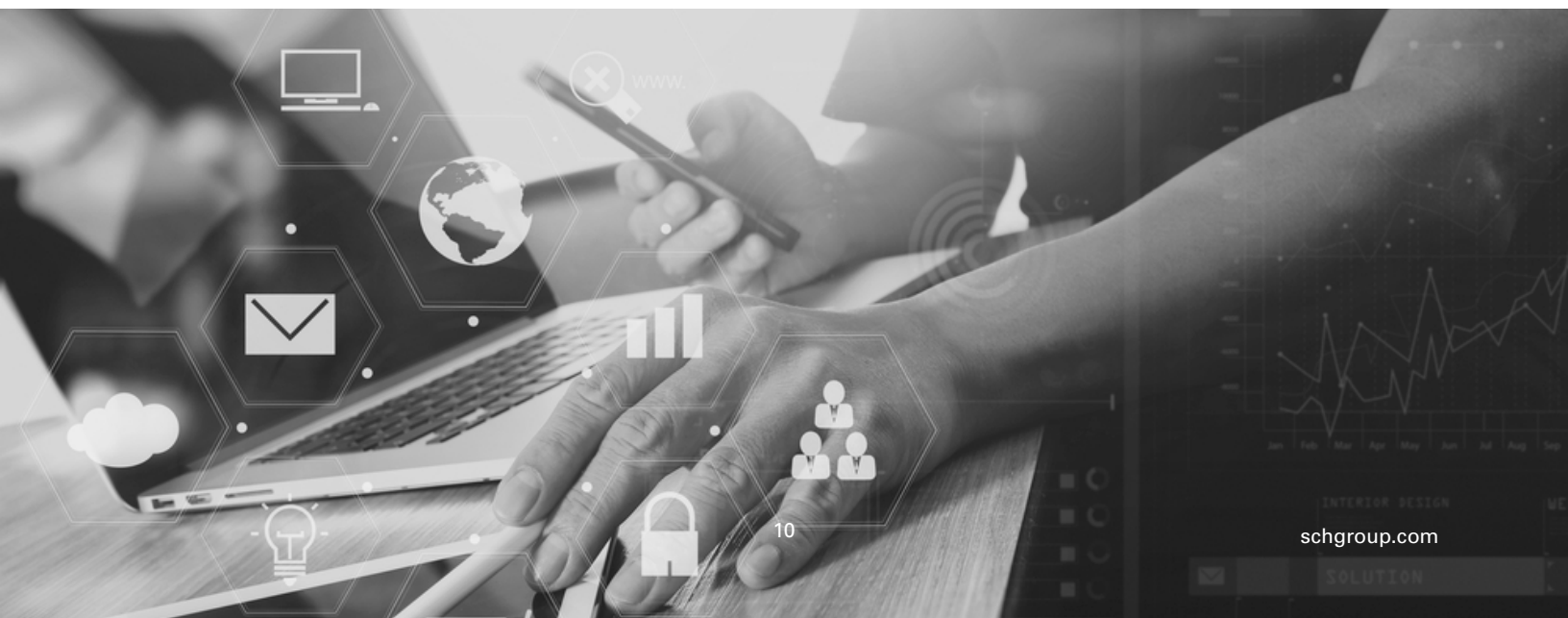
Assessment Pillars and Common Technology Solutions

> **An effective technology roadmap considers much more than just the strengths and weaknesses of available technology solutions. As previously noted, it considers these elements in the larger context of your organization's key cultural, organizational, and aspirational components to ensure successful adoption and strategic alignment.**

The Five Pillars of an Effective Assessment

During a technology assessment, which is the initial step when developing a roadmap, SC&H Group's Technology Advisory Services team identifies opportunities that fit best according to five key pillars:

1. **PEOPLE:** We examine an organization to understand the different types of roles interfacing with technology, and how technology can enable their success.

2. **PROCESS:** We review key business processes to see where technology might be able to streamline efforts in providing clients with a better experience, or by offering the organization a more efficient method for handling certain systems.

3. **TECHNOLOGY:** We take a comprehensive, vendor-agnostic look at what technologies are available based on your goals and objectives, allowing you to obtain a holistic view of how technology can impact your business in specific areas.

4. **BUSINESS GOALS:** We engage in discussions with ownership related to the current and future direction of the organization. This is one of the most important elements of defining a technology roadmap, as it provides critical context for aligning technology tools with strategic priorities in the most opportunistic way.

5. **FINANCIALS:** We gain insight into financial performance so we can help an organization think about this information in two parts. First, we review where technology can help support financial growth, and second, we assist by thinking through the investment strategy associated with implementation and adoption of a technology roadmap.

Proper examination of these components ensures that we determine the scalable solutions best-suited to your organization's practices and goals.

Common Solution Types Included Today's Technology Roadmaps

While there is a wide array of available technology solutions—with more being released every week—the roadmaps of mid-market companies are regularly addressing current needs and future opportunities with some combination of six key components:

- Cloud-Based Services
- Hybrid Cloud-Based Services
- Security
- Internet of Things
- Industry-Specific AR and VR Applications

Cloud-Based Services

Cloud-based solutions have some of the most profound benefits for mid-market companies. Traditionally, on-premise solutions are complicated, expensive, and slow to launch and optimize. Conversely, cloud-based solutions eliminate the need to manage hardware or software, allowing for enhanced agility, speed, scalability, cost reduction, efficiency, and collaboration.

As a result, many legacy business platforms are likely to go out of business within the next five to seven years. In fact, cloud adoption is likely to reach 85 percent in the next two years, and more than 60 percent of businesses plan to move their IT infrastructure to the cloud in the near future, according to a recent Cloud Industry Forum (CIT) report.

Most of today's technology roadmaps include cloud-based solutions for one or more business areas, such as accounting, enterprise resource planning (ERP), CRM, and human resources.

Hybrid Cloud-Based Services

While cloud-based solutions have surged in popularity, some technology roadmaps are identifying hybrid cloud solutions as better suited for differentiated services.

Hybrid cloud-based solutions use a mix of third-party, public cloud with on-premise, private cloud services. This middle-ground approach allows organizations to reduce data exposure and risk, since a single point of failure can no longer bring down the entirety of normal company operations.

Security

Security is a growing concern throughout nearly every industry—for good reason. From data breaches and stolen laptops to infections from viruses, spyware, or malware, security threats can lead to unauthorized access to sensitive data, downtime, consulting repair fees, software replacement, and loss of files.

Considering these wide-reaching incidents, today's best roadmaps identify technology solutions and providers that can protect your company's data. This is particularly critical as organizations explore cloud-based solutions. Roadmaps must ensure not only that the company has the capability for these solutions, but also that they maintain ongoing data security.

Internet of Things

The Internet of Things (IoT) continues to evolve from a promising concept to a technology revolution, driving new business models and revenue streams across nearly every industry. However, while much of the focus has been on the hardware and devices themselves, the question for organizations now is in the software platform that runs those devices.

As the IoT expands, software developments are allowing devices to shift from using analytics engines to evaluate a current path to using predictive analytics to project a future scenario. Therefore, many of today's roadmaps are incorporating IoT developments that improve system reliability, customer service, product quality, and efficiency.

Industry-Specific Augmented and Virtual Reality Applications

AR and VR are presenting new opportunities for differentiation and improved quality, productivity, and service levels. These opportunities, which entail transforming the way people interact with others and software systems, are coming mostly in targeted, industry-specific applications.

For example, in construction, some roadmaps are including VR applications that allow clients to view plans and alterations through an immersive experience, while AR is being used for training purposes. Similarly, VR is allowing real estate clients to more efficiently tour and evaluate potential properties, without ever leaving the real estate office.

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Frequently Asked Questions

My organization needs an effective technology roadmap. Where do we begin?

The first step in developing a roadmap is conducting a technology assessment with a specialized advisor, which will examine the five pillars mentioned previously specific to your organization (people, process, technology, business goals, and financials). Together, you and the advisor develop a comprehensive strategy, ensuring that each technology solution accommodates current and future opportunities.

During implementation, the focus is on effective system migration, followed by results measurement to confirm function and value. Throughout the planning, execution, and evaluation phases, the advisor continuously scans for hidden business opportunities and areas of vulnerability, implementing a complete security plan that protects your assets.

How do I know if my organization is spending the right amount on technology?

While the appropriate technology spend varies based on numerous factors, such as market, industry, goals, and structure, the typical mid-market company technology spend averages 4-6 percent of revenue. According to the OnResearch survey, 48 percent of mid-market companies spend 1-5 percent of revenue on technology, while 28 percent spend more than 5 percent.

A high-quality, comprehensive assessment will determine the proper technology spend for your company.

What does a technology assessment examine?

As noted above, a technology assessment examines your company and IT setup to determine the best-suited solutions relative to your organization's people, processes, technology, business goals, and financials. The assessment looks for opportunities in connectivity, contracts, internal service metrics, software, investments, general and capital budgets, industry standards, and spend.

***How do I know that my organization will be able to implement
my technology roadmap?***

One of the keys to a successful technology roadmap is receiving expert guidance in not only developing it, but also implementing it. After all, the time and effort required to create a roadmap is only worthwhile if its solutions are successfully adopted and produce value for your company.

For instance, mobile technologies and other solutions that allow for better vendor and customer integration may serve as valuable additions to your company's roadmap. However, some solutions may not integrate with existing legacy platforms. Further, implementing them in a cost-effective manner may require resource beyond your internal IT staff.

Therefore, when selecting a specialized technology advisor, ensure that the firm will focus on identifying only realistic, scalable solutions best suited for your organization, then work with you to ensure effective implementation and adoption. The advisor should possess both deep business acumen and technology subject matter expertise, allowing them to fully align, implement, optimize, and spur adoption of solutions that serve your executive vision.

Are all technology advisors aligned with a preferred software provider?

No. While many advisors do have preferred software vendors, some do not. For example, SC&H Group's Technology Advisory Services team is technology and vendor agnostic.

This is an important qualification to consider when selecting an advisor, as independence helps to ensure unbiased guidance, based solely on your organization's needs, goals, and culture. Further, it allows for realistic expectations, thereby increasing the success of your technology roadmap.

My organization has limited financial resources. Is it still worth going through the process of developing a technology roadmap?

Absolutely. A qualified advisor will ensure that your roadmap incorporates only those solutions that align with your company's financials and business goals. Further, a technology roadmap can be especially valuable for companies with limited financial resources, since many of today's emerging technologies (e.g., cloud-based solutions) can yield substantial time and cost savings over traditional or homegrown solutions.

Engaging the Right Technology Advisor

> **The quality and implementation of a technology roadmap can make the difference between unrealized potential and dependable, long-term enhancements in productivity, savings, security, and growth.**

So, while companies can develop a roadmap internally or in conjunction with technology vendors, many CEOs, CFOs, COOs, and other C-suite executives are recognizing the benefits of engaging a specialized technology advisor.

For instance, a technology- and vendor-agnostic advisor can serve as a valuable strategic partner for your business. With technology permeating all aspects of an organization and new products and services emerging every week, the right advisor can help you analyze new technologies and transform these trends into strategic opportunities.

Further, by conducting a thorough, independent assessment of your organization, an advisor can identify and align solutions to your company's people, processes, technology, business goals, and financials—all while elevating the performance of your internal IT resources.

Advisors that possess both business acumen and IT expertise can more effectively identify strategic solutions and validate best practices. At SC&H Group, for example, our Technology Advisory Services team includes a variety of former CIOs of mid-market companies and larger scale enterprises in various industries, letting them span the gap between your technical resources and fellow C-suite executives.

Ultimately, by engaging a highly qualified, unbiased advisor, you will gain a powerful partner in today's competitive market. Together, you can develop and implement a business-driven technology roadmap that guides your technology investments, ensuring you have the right tools and resources to achieve short- and long-term success.

For More Information

To learn more about how a properly aligned technology roadmap can help your organization reach its true potential—through new technologies that enable progress, generate value, and support growth—click here to contact SC&H Group's Technology Advisory Services team.

About SC&H Group

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