

Setting the Course: Building a Comprehensive IT Roadmap for 2024

By Bruce T. Nelson

In the rapidly evolving digital landscape, preparing an IT roadmap for 2024 and beyond is vital for any business. As with any roadmap, a truly successful journey starts with preparation and planning. This foundation is the key to any successful journey. Once you know where, even if how to reach your destination isn't fully defined, you can start on your path and progress to key milestones. Adaptability becomes essential to handle the inevitable twists and turns along the way. Clear communication and teamwork are paramount in following this roadmap to success. The final destination is not just an end but a launchpad for future planning. Here are some of the ways we approach our own IT roadmap which we apply both internally as well as when advising our clients.

Preparing and Planning

A lot of businesses have a general plan when it comes to their IT, but for a truly effective roadmap you need to extend your range and ask more in-depth questions. At Vertilocity, we walk our clients through the whole process. A lot of small and mid-size businesses that have 50 to 250 employees still think that their data, privacy, and security strategy revolves around anti-virus and backup solutions. This is only looking at core functions, one of several milestones on any IT roadmap. As businesses continue to expand to cloud solutions and cloud computing platforms, IT strategies need to incorporate these elements, placing suitable controls to manage them effectively. This allows the right people to have the right data when they need it, while safeguarding the data, regardless of whether it's housed on-premises, integrated with your manufacturing or EMR system, or stored in a cloud solution.

Here are some key questions we like to ask during the preparation and planning stage of any IT roadmap:

- What data do we have?
- Who owns the data?
- Who has access to the data?
- How do we protect the data?
- How do we backup the data?
- How do we get the data back if we need to?

The answers to these questions will help you in mapping out the key milestones for your business's roadmap.

Key Milestones

Different businesses need different milestones. Some need to update and revamp their hardware systems. Some need to reinforce their data security. Some need to improve productivity by adding automated solutions. Some need to expand their IT solutions as their business grows while others may need to downgrade their solutions to cut costs and improve efficiency. Some need a mixture of all of the above. Whether working internally or with a MSP, it's important to know which are the key milestones you'd like your organization to achieve in the coming year.

Determining these key milestones is fundamental, and it's equally important to establish a detailed path with specific steps outlining the journey towards achieving these targets.

At Vertilocity, the three areas we're seeing investment are:

1. Data & Privacy
2. Automation
3. Artificial Intelligence

Data & Privacy

Businesses are accumulating big, heavy data sets and sensitive data is significantly increasing. [Studies have shown](#) that anywhere from 88% to 95% of data breaches at companies are caused by employee mistakes. This trend highlights the urgent need for robust data governance and privacy protocols within an organization's IT framework. As data becomes increasingly integral to operations, the importance of securing this data against both internal errors and external threats cannot be overstated. Implementing rigorous training for staff on data handling and privacy, along with deploying advanced security tools, is no longer optional but a critical necessity.

Moreover, regulatory compliance adds another layer of complexity to data management. Many industries, whether finance, healthcare, or those operating in Europe or overseas, are subject to stringent regulations. It's crucial for organizations to have a detailed plan that not only identifies but also secures data, adhering to these regulatory requirements. Ensuring compliance with such diverse and often stringent regulations is an essential component of an IT strategy.

Incorporating data and privacy considerations into your IT roadmap is thus essential. A comprehensive IT roadmap should include strategies for regular data audits, adoption of privacy-enhancing technologies, and compliance with evolving data protection regulations. In addition, investing in advanced security solutions is crucial for defending against sophisticated cyber threats. Establishing clear guidelines on data access, usage, and storage, tailored to the specific needs and scale of your business is vital. With the shift towards cloud-based solutions, ensuring that cloud service providers adhere to strict data security and privacy standards is imperative. Ultimately, an IT roadmap that effectively integrates data privacy, security, advanced security investments, and regulatory compliance not only safeguards against breaches but also builds customer trust and upholds your company's reputation.

Automation

Clients are feeling it. Our peer groups are feeling it. Finding talent is going to be an increasing challenge in the coming years. Fewer individuals are going into professional services like accounting and IT. Data from the [American Institute of Certified Public Accounts \(AICPA\)](#) shows a significant 7.4% reduction in accounting graduates in the U.S. for 2021-2022, a record drop since the mid-90s. Overall, the [two biggest challenges](#) tech industry leaders have found are recruiting talent and retaining talent. Urged to remedy over hiring, bolster efficiency, lower costs, and escalate automation, the tech industry has witnessed the layoff of over 150,000 employees in the US since 2023 started according to Deloitte Insights. A survey by [MIT Technology Review Insights](#) shows that 56% of global tech leaders find a general scarcity of IT and tech applicants, while 64% find candidates lack the required skills or experience for these positions. With fewer talent resources available, automation is going to be key for business organizations of all sizes.

This is a key milestone on the IT roadmap that we're looking at for our own organization as well as our clients. We're asking crucial questions like 'What are we planning ahead for?' and 'How do we use the tools out there to automate solutions?' If a business is expanding, or if its employees are manually processing reports and relying heavily on numerous Excel sheets for information extraction, it's imperative for clients to consider this. To remain competitive in the long term, automation and the use of technology are essential. We're seeing more and more adoption in our space. Historically, it's been the larger companies that adopt such practices, often believing smaller businesses don't have enough justification for it. However, during the COVID era and in learning how to effectively interact with clients, teams, field service technicians, patients, or any other group, it has become clear that technology is necessary to streamline these functions.

Automation has become the second biggest area of investment for companies we work with. And it's making a huge difference. For example, a client with 70 field techs manually updates spreadsheets and uploads them to Dropbox where someone retrieves the data for billing. This process is labor-intensive and prone to errors. We proposed automating it by allowing techs to input data directly via a mobile device into a secure portal. This data would then be integrated automatically into the billing system, enhancing security and efficiency. Such automation is crucial for growing companies like this, where scalability hinges on reducing the need for manual data processing. By implementing effective automation, key personnel within the organization can shift their focus to more impactful, higher-level tasks, reducing the need to hire additional staff for scaling operations that are currently manual. That's a big part of the IT roadmap for a lot of organizations going into next year.

Artificial Intelligence

We see how AI is transforming the way we work, as evidenced by tools like ChatGPT. AI and automation are distinct yet often confused concepts: AI involves mimicking human intelligence, whereas automation refers to streamlining repetitive tasks. Organizations are leveraging AI for content creation and process optimization. The key question is, how can we harness this technology to produce more content, raise awareness, and draw meaningful insights from diverse data sources for informed decision-making? This field is still young, yet the pace of technological change is astonishing. Consider how Microsoft XP lasted two decades, but now we frequently see new versions and technologies that speed up our activities. AI, once a concept, is now an integral part of our daily operations. Major players like Microsoft, Google, and Amazon are heavily invested in AI. Their involvement signals a need for the rest of us to understand how to utilize AI for deeper insights and more effective data analysis, shaping decisions that are crucial for our progress.

We're looking internally and working with clients to see their investments and spends going forward for the next 12-18 months. Just like in mountain biking or skiing, if you're only focused on the rock or turn right in front of you, it's too late to effectively maneuver. Things are accelerating too fast. You need to be looking further ahead, anticipating turns and obstacles. If you are not already exploring better CRM solutions or sales analytics to manage your team, you'll fall behind. The pace of change demands forward-thinking – planning routes, looking further ahead, making sure you have the right tools to get there, and the right team to do it. It's not just about what are we doing this month or spending next month. It's really about a comprehensive evaluation of your operations, technology, and teams. This holistic approach helps you see how they all work together, keeps you competitive, and ensures high-level service to your constituents, patients, or customers while also enhancing your teams skills. We must equip them with the tools for success, focusing not just on the immediate path but on the entire trail ahead.

Potential Roadblocks

One huge roadblock along the IT roadmap is application sprawl or excessive application use. Without clear criteria, your IT roadmap may become cluttered with appealing but impractical options, lacking a strategic decision-making framework. For example, the marketing department independently adopts its own system. Then IT is faced with the challenge of controlling access and ensuring data security. Such unguided choices, made to suit individual department needs, can disregard the overarching IT strategy. Effective governance is key in determining priorities among numerous potential projects. Even if a particular initiative ranks lower on the priority list, establishing a governance framework ensures buy-in and aligns efforts with the organization's long-term goals.

This approach avoids the pitfall of adopting apps that might solve immediate problems but create others, such as security risks. A well-structured governance system keeps everyone on track, ensuring priorities are clear and communication is consistent across the organization.

The Path Ahead

Over the next 12 months, it's essential to critically evaluate your technology. Are you falling behind with dated on-premise solutions, legacy servers, or old ERP systems? These are signs that immediate upgrades are needed. Next, you need a detailed plan and buy-in from your team to get these things in place. If your technology roadmap lacks well-defined starting points and milestones, whether managed with internal resources or an MSP, it becomes challenging to navigate and achieve your long-term IT objectives. As you create 2024 IT roadmap, your first step is to establish core milestones. The core milestones we recommend at Vertilocity are implementing core monitoring, alert systems, a dependable help desk, and a foundational IT security plan. Assess the core essentials you need, manage your spend based on these core milestones, then build from there. If you haven't been down these paths before, it's helpful to talk to organizations like ours to show you how to get from Point A to Point B. We've helped thousands of clients create, modify, and execute their IT roadmaps. Achieving these initial milestones is crucial. While it may be new tech to your organization, it's not new tech in the IT space. You can budget and plan for that. Engaging a technology partner with expertise in this area can accelerate the process of establishing a solid baseline and stabilizing your core technology infrastructure.

Looking ahead two years, or even 5-10 years, though challenging, is vital. Take cloud adoption as an example: what was once a future consideration is now a standard practice. A well-planned technology roadmap, with initial milestones achieved, paves the way for more advanced pursuits like automation, AI, and enhanced security.

Your technology roadmap should reflect your organization's current stage in the tech landscape. Once the initial milestones are achieved, you can delve into more sophisticated areas such as advanced data security, business intelligence, and other tools for digital transformation. It's about being adaptable and strategic, crafting a pathway that aligns with your overarching objectives. For instance, a healthcare organization's strategy might focus on using technology and automation to enhance service delivery, without locking into specific tools at the outset.

As you progress, continually evolve with planning and updates, incorporating elements like AI to streamline operations. Engaging with experts who can advise on necessary technologies and those that can be skipped is key. For sectors like healthcare, where attending tech conferences might not be feasible, having advisors attuned to the latest technology trends and investments is invaluable. They offer crucial insights, enabling your organization to stay at the forefront, allowing you to concentrate on your main goal, like improving healthcare services.

Building Your 2024 IT Roadmap

Here are four essential questions to consider as you build your 2024 IT Roadmap:

1. Are there compliance guidelines around what you're doing (e.g., GDPR, HIPAA, Gramm-Leach-Bliley, etc.) and how is your organization impacted by them? Complying with regulations will drive your roadmap and dollars. For instance, consider new regulations like the CMMC for defense contractors. Compliance with these standards, including undergoing audit reviews to demonstrate the implementation of security measures, threat analysis, etc., is crucial. Such legislation significantly shapes your IT roadmap, particularly from a compliance perspective. It's important to stay informed about not just international and national regulations but also state and local laws, especially concerning privacy and notification requirements. The rules in California on privacy and notification requirements, for example, might differ greatly from those in Wyoming. Understanding these regulations, their impact on your business, and how they affect your client interactions is vital. This knowledge will guide the development of your IT roadmap and the adoption of technologies to effectively manage these requirements.
2. How does technology factor into my organization? For example, if my practice specializes in rural health, my IT roadmap needs to address how I can see more patients and provide superior care through video conferencing and secure applications like Microsoft Teams. The challenge is how to efficiently offer telemedicine to someone living 150 miles away. Conversely, if I'm a local primary care physician with 90% of my patients visiting in-person, my focus shifts to leveraging AI for enhanced outcomes. This includes quicker access to clinical records, expedited research for case-specific information, and efficient validation and reporting processes to improve patient care.
3. Are we allocating resources wisely to safeguard our data? Do we have the appropriate partners and support, or are we opting for the most cost-effective approach and hoping for the best? Companies large and small need to set policy to ensure their data is safeguarded.
4. Does my organization have the capability to accomplish this on its own or do I need outside help? If your internal IT team possesses the necessary skills and resources to develop and implement these solutions, it positions your organization for effective execution. However, if there are limitations in expertise or resources, exploring a partnership with a Managed Service Provider (MSP) like us could be a strategic move, providing the expertise and support needed for successful implementation.

To learn more about how Vertilocity can help you with your 2024 IT Roadmap, contact Bruce Nelson at bnelson@vertilocity.com or 833-246-7500.