

ISSUE 183

Focusing Your Technology Modernization Investment Strategy

Past experience with the cost and risks of technology modernization projects is driving boards to be more selective about allocating capital and has increased the emphasis on the certainty of delivering tangible value.

Technology modernization is a topic that has found its way into every C-suite and boardroom. In recent years, significant investments have been made by companies recognizing a need to modernize to avoid losing market share to "born digital" entrants to the market. Banks and insurers, for example, were concerned the failure to modernize would result in a loss of market share to emerging fintechs — indeed, a competitive threat that framed a potential winner-takes-all scenario. With the prospects for growth and returns from mobile, Al and cloud, and the availability of cheap capital, the impetus to initiate a transformation journey was strong.

But the story has changed. There's been a slowdown in the "hype" cycle around investing in tech modernization. In financial services, the winner-takes-all view softened as fintechs carved a role in the market that did not crowd out incumbents largely because, over time, some became technology providers to traditional institutions and others chose to partner with banks to offer end users access to banking services (fund transfers and instant payments). For companies across all sectors, the initial return on investment (ROI) associated with new technologies underdelivered. And, of course, the cost of capital jumped significantly, raising the hurdle rate for all investments.

Thus, boards now face different conditions when evaluating investments in transformation programs. Technology modernization, digital transformation and strategic IT projects must compete with other

business initiatives without the hype advantage of the past. This means proponents of these initiatives must articulate a stronger, more compelling business case for delivering value-added outcomes with less risk.

There are costs associated with *failing* to modernize. In a global survey of more than 1,000 chief information officers, chief technology officers, chief information security officers, and other technology executives and leaders, 70% of the companies represented view technical debt as a major drag on their ability to innovate. Over time, that translates to inability to execute strategy, increased operating costs, lost revenue, poor customer experience, inability to retain and attract top talent, and the attendant effects of losing competitive advantage, market share and shareholder value.

Boards now face different conditions when evaluating investments in transformation programs. Technology modernization, digital transformation and strategic IT projects must compete with other business initiatives without the hype advantage of the past.

Accordingly, an evaluation of the board's framework for navigating technology investments relative to other business priorities is in order — with the objective of maximizing value and minimizing financial risk. To that end, directors may benefit from considering the following 10 questions underpinning a practical framework for addressing this objective:

- Do we have a clear understanding of the lessons learned from our modernization investments over the last five years? Lessons learned begin with understanding the extent to which promised returns were delivered and, most importantly, why or why not. What is working? What is not? Can we do better? Over and over, management must examine and adapt. Best practices and mistakes should be identified through a post-mortem and improvements incorporated into the business case development process and project management approach.
- Have we balanced our long- and short-term perspectives? The long-term narrative should provide a clear architectural strategy regarding where management's IT investments are taking the company, how emerging or unanticipated technological developments will be considered (creating a need for modularity and flexibility), and what the enterprise is expected to look like in, say, five years. The board should direct management to give them this long-term view so they have a contextual perspective with which to evaluate whether proposed modernization investments and selected technology partners are directionally compatible with the strategy and vision going forward.

^{1 &}quot;The Innovation vs. Technical Debt Tug of War," Protiviti, May 2023, www.protiviti.com/us-en/global-technology-executive-survey.

As for the short term, management should articulate principles that enable business agility and continuous modernization, considering that new technologies will emerge, so systems can meet changing needs without having to "rip and replace" critical components. Such principles might address a streamlined, modular architecture for ease of updates and integration; support for modular, agile deployment; real-time and event-driven processes to enhance responsiveness; scalable and secure architecture; a unified data repository to establish a single source of truth; a seamless customer experience-driven environment; and sensitivity to addressing compliance needs.

- Do we have the right partners? Rather than taking the view that everything should be
 modernized, directors should consider being more selective in evaluating whether the
 technology fits a use case for modernization and how that decision is supported. Most
 importantly, they should understand how and why a particular vendor is selected.
 - The company may have a single cloud provider or a hybrid environment. Most organizations have discovered some the hard way that choosing between cloud providers like Amazon Web Services (AWS), Microsoft Azure and Google Cloud Platform can be a complex task, as each offers unique advantages and has different approaches with respect to similar issues. Because they may or may not align with a company's specific needs and strategic objectives, it is important to understand these differences and what specific services the company needs. The key is to balance a vendor's innovation path with the company's overall strategy. If they are incompatible, a change in vendors is needed.
- Do we have the right skills, and are we connecting with the business? Much has been written about the exhaustive competition for talent in the technology space, as there are many reasons for it. The key point in this discussion is that building capabilities without the skill sets needed to leverage modernization investments and maximize their value over time is a common issue. Internal resources are especially important when embracing a tailored approach for modernization. While circumstances vary, global capability and delivery centers can be useful in deploying the organization's entire technology talent pool so that there is cost-effective collaboration across geographies. Transforming the company to a product- or platform-centric organization can break down silos and facilitate resource mobility. In addition, large-scale reskilling and training programs may be necessary. External resources can be hired to bring to bear specialized knowledge that addresses internal gaps.

As for connecting with the business, one study noted that 74% of organizations have started a legacy system modernization project but failed to complete it.² The study also found that one of the most significant obstacles to a successful modernization project is a disconnect

² "74% of Organizations Fail to Complete Legacy System Modernization Projects, New Report From Advanced Reveals," Business Wire, May 28, 2020: www.businesswire.com/news/home/20200528005186/en/74-Of-Organizations-Fail-to-Complete-Legacy-System-Modernization-Projects-New-Report-From-Advanced-Reveals.

of priorities between technical and business leadership teams. Directors should satisfy themselves that this is not an issue underpinning a tech modernization proposal.

Breaking down complex projects into more manageable components enables project teams to learn and fail fast, focus on the customer, build a superior user experience, invest for flexibility and speed, and think modular and agile.

- Do we buy, build or deploy a hybrid approach? When it comes to modernizing infrastructure, the decision to buy or build is a critical one. Beyond the obvious factors such as the organization's specific needs, resources, skills and strategic objectives, other considerations include cost, the extent of the required customization, the scalability of design, ongoing maintenance and support, and speed to market. In addition, the decision isn't always either/ or. In many cases, a hybrid approach combining purchased and custom-built solutions offers the best balance of cost, flexibility and speed.
- Can we break down massive investments into discrete components? Much less willing now to cut that \$100 million check, many companies are leaning into discrete investments to generate value from smaller increments of work. Breaking down complex projects into more manageable components within the context of the longer-term plan discussed above enables project teams to learn and fail fast, focus on the customer, build a superior user experience, invest for flexibility and speed, and think modular and agile. It also helps to avoid wasted effort (e.g., the physical hardware of the iPhone needed to exist before developers could create software applications, or apps, specifically designed to run on it). Likewise, technology infrastructure investments must be appropriately sequenced.
- Do we have the data we need to sustain a strong customer focus? Companies have learned that to put the customer first, they need real-time data. Without it, how can management know whether the customer experience is getting the expected results? This is the hard part of fostering sustainable change and must be addressed to avoid making small changes in one part of the process that create undesirable impacts on other parts from a customer perspective.
- Are we thinking outside the box? Fostering internal competition among candidate projects encourages creativity and outside-the-box thinking on framing how and why to undertake projects. Stepping out of the confines of the traditional sandbox where technology executives play can make a difference. For example, some organizations may see the benefit of starting from a digital-first clean slate to deploy new infrastructure based on modern technologies

 separate and apart from the legacy environment to support new products or markets.

This strategy may entail establishing a new legal entity because the complexities of the legacy enterprise may make achieving the full architectural vision too difficult. Some companies that try to transform their legacy infrastructure are losing hundreds of millions of dollars.

• Have we raised the business case bar to the right level? It's not enough to pursue technology modernization based on the allure of new features and functionality. If decision-makers fail to see clear, measurable value from investments in new tech capabilities, they should select other opportunities that are more likely to deliver value for customers and shareholders. This makes it incumbent on the company's technology modernization leaders not only to present to the board a compelling business case for a project but also to execute it with precision and a strong focus on delivering to expectations.

Business case development should begin with the premise that an organization (and its investors) can earn attractive rates in an inflation-adjusted bond with minimal risk. Thus, the business case supporting selected use cases must help answer the why, when and what questions. Why do we need to make this investment now? Why not six months, 12 months, 18 months from now? What is the opportunity cost of moving forward at this moment? Is there an external event driving the proposal? Does it involve an innovation that presents an attractive market opportunity? So, notwithstanding the hype, when is the right time to invest, and what is the expected outcome and projected ROI?

• Are we undertaking the best approach to modernize? Once the value proposition is defined and the business case approved, navigating the technology modernization journey requires a meticulously charted course that encompasses due diligence, discovery and the establishment of waypoints to ensure the achievement of key milestones. The technology modernization process often involves adopting a standardized approach that addresses specific organizational needs while remaining flexible enough to integrate various solutions. The most common components of a standardized process are upgrading to new versions or features of existing software, building new applications from scratch, acquiring new software and migrating data and processes, and acquiring another company with a modernized application stack.

With the longer-term strategic narrative and ROI the primary focus for go-forward decisions on technology modernization projects, it is critical to center on four interrelated drivers that can deliver the expected value:

- Lowering costs
- Gaining more flexibility and power in deals with strategic vendors
- Overcoming the inability to build new functionality into current applications
- Meeting regulatory compliance requirements

These four drivers are fundamental to defining and communicating a clear value proposition underpinning tech modernization projects presented to the board.

Proposed investments in selected technology modernization use cases presented to the board must be supported by a compelling business case that demonstrates how value and ROI will be delivered, all within the context of a longer-term journey explained in "plain English."

Technology modernization can present a tough conversation in the boardroom. It boils down to the opportunity cost of allocating capital — a cost as high as it has been since the turn of the century. Consistent with their responsibility to company shareholders, directors should ensure the organization defines the overall objectives clearly, specifies opportunities for improvement, identifies the right technologies and lines up the necessary resources to undertake the project.

Most importantly, proposed investments in selected technology modernization use cases presented to the board must be supported by a compelling business case that demonstrates how value and ROI will be delivered, all within the context of a longer-term journey explained in "plain English."

How Protiviti Can Help

Every business is becoming a technology business. Whether you are looking to automate, modernize or embark on an end-to-end transformation journey, our Technology Consulting solution can help. Our services range from strategy, design and development to implementation, risk management and managed services.

To assist with technology modernization projects, Protiviti offers industry-specific expertise, especially in areas like SAP, ServiceNow, Salesforce, Adobe and Microsoft, to provide tailored solutions. We apply a risk-adjusted approach to integrate audit and risk compliance perspectives and help ensure that modernization efforts do not create new problems, particularly in regulated industries. We also emphasize a practical mindset that emphasizes a focus on value delivery and achieving the goals set out by the technology modernization project, making sure that investments deliver returns without entering an unending cycle of investment. These approaches highlight our commitment to delivering practical, industry-aligned and risk-conscious technology modernization services.

Our professionals become your trusted advisers, providing insight and strategic vision through innovative actions embedded in everything we do. Our experts leverage agile processes and are certified in the latest technologies and platforms, keeping you at the forefront of technology transformation.

About the Authors



Kim Bozzella Managing Director, Protiviti

Kim is Protiviti's global leader of Technology Consulting. She is responsible for the strategy, offerings, consulting delivery and external alliance partnerships for all of Protiviti's technology capabilities.

Contact Kim at kim.bozzella@protiviti.com.



Johan van der Walt Managing Director, Protiviti

Johan has been a consultant, product owner and venture capitalist in his career serving clients in all aspects of financial services. He advises on technology transformation and modernization projects.

Contact Johan at johan.vanderwalt@protiviti.com.

Protiviti (www.protiviti.com) is a global consulting firm that delivers deep expertise, objective insights, a tailored approach and unparalleled collaboration to help leaders confidently face the future. Protiviti and its independent and locally owned member firms provide clients with consulting and managed solutions in finance, technology, operations, data, digital, legal, HR, risk and internal audit through a network of more than 90 offices in over 25 countries.

Named to the Fortune 100 Best Companies to Work For® list for the 10th consecutive year, Protiviti has served more than 80 percent of Fortune 100 and nearly 80 percent of Fortune 500 companies. The firm also works with government agencies and smaller, growing companies, including those looking to go public. Protiviti is a wholly owned subsidiary of Robert Half Inc. (NYSE: RHI).

