Mind the Gap: Overcoming the Top 10 Adversities of Technology Implementations
Mind the Gap: Overcoming the Top 10 Adversities of Technology Implementations

Despite numerous universal external hurdles, there are 10 main, internal challenges that need to be addressed in order to achieve a successful technology implementation. A word of caution for corporate executives: Mind the implementation gap. Most managers know that strategic implementation of technology projects is critical to their organizations’ high-performance objectives.

But many also concede that their companies struggle to bridge the gap between strategic IT formulation and its deployment. According to the Project Management Institute's (PMI) 2014 “Pulse Report of the Profession,” more than half of strategic technology implementations fail to meet their original goals and business intent because of the gap. This poor performance results in losses of nearly $110 million for every $1 billion invested in projects and programs across the corporate sector, according to the report.

Overall, in virtually all lines of business and in every corporate sector, the reasons that projects fail reflect similar strategic shortcomings: unclear scope and success criteria, lack of strategic alignment of projects to organizational strategy, the absence of a change-management program and related skills, underestimation of project scope and costs, inadequate risk-management procedures, and lack of buy-in or engagement from project sponsors.

There are numerous universal, external factors that provide challenges for project managers and executives across the organization, particularly as it relates to successfully getting their initiatives adopted by the customer or end user. People are, by nature, often resistant to change. This cliché is true particularly when dealing with new technologies that carry a change in process or procedure for the end user. Additionally, project managers often overlook the criticality of well-planned, recurring communications. Lack of proper communication planning, adoption planning, and assessment or impact planning is often the biggest universal pitfalls to proper IT implementations.

Despite these external hurdles, there are 10 main, internal challenges that need to be addressed in order to achieve a successful technology implementation.
Challenge 1 The Requirements Quagmire

One of the first potential implementation pitfalls lies at the very beginning of the process—spelling out and codifying requirements. A good foundation is just as crucial when implementing a technology initiative as it is in building a sound structure in architecture, engineering and manufacturing. The foundation for deploying a technology initiative starts with developing and documenting clear business and technology requirements. Some hurdles to successful technology implementations include the lack of clearly spelled out needs in business-requirements documents, and mechanisms to manage features that may stray from the original requirements, such as program scope.

Best-practice IT program management often calls for an initial requirements-gathering cycle, during which program leaders prioritize high-level requirements. According to Mitre Corp., which studies this issue extensively, requirements for system implementation should be complete, unambiguous, consistent and feasible—and traceable to original business and mission needs. From the initial cycle, developing a requirements analysis and statement should grow into a collaborative process, involving users, program and business unit managers, upper-level executives, and other stakeholders to avoid putting accountability on one person. The collaborative process will generate baseline requirements that can be verified—end-user needs, for example—before being used to drive design and architecture.

Failing to establish high-priority requirements can result in serious—and costly—consequences. For example, one bank’s transformation effort went over schedule by three months and lost $8 million when a key group—the finance department—got involved just a few months before the system was due to go live. Discovered late in the process, the finance department’s business needs required complicated changes to the system. That bank’s experience is an example of “scope creep,” which often happens when new features are added after the requirements process. A certain amount of creep can be expected in any project; however, without clearly defined, carefully documented and prescribed specifications, a project’s scope can morph as it progresses, resulting in blown budgets and missed deadlines, among other serious consequences.

Best-practice IT program management often calls for an initial requirements-gathering cycle during which program leaders prioritize high-level requirements.

Minding The Gap:

Typically, the principal causes of scope creep are deficient requirements analysis, not involving end users in the requirements and design phases, underestimating the complexity of a project and the lack of process with managing changes in project parameters. Strong project control can be established by defining a project’s scope in an initial phase—say, six months—and making sure that all stakeholders sign off on the plan. Beyond the initial phase, a board of stakeholders and business unit leaders should approve all change requests.

Along with a requirements statement, a robust business case can serve to get C-suite executives and other top executives firmly and dynamically behind the project. A succinct, on-point business case establishes a clear view of the project’s strategic value, one that transcends the technical piece of the program and maintains a focus on business objectives and on how, like how timelines will be met and cost overruns will be avoided.

Challenge 2 Executive Sponsorship, Sponsorship, Sponsorship

Another large impediment to a successful implementation is the absence of proactive executive sponsors. The PMI “Pulse Report” showed that despite the fact that sponsorship is a top driver of organizational change and program success, two out of three technology initiatives don’t have actively engaged sponsors. Also, the average percentage of projects with active sponsors has remained at for the past few years.

Sponsorship is particularly vital for change management, a crucial component of the implementation process. Companies need an executive sponsor—people of rank within the organization—who can champion a project and propel change.
The success of a technology/process overhaul can depend in large part on the effectiveness of such sponsorship, a key component to any effective change-management program.

Indeed, change management is a major pitfall for companies embarking on a transformation project. A 2013 study of change management and culture by the PWC’s Strategy & Katzenbach Center (pwc.to/1AJUuA7) found that only about half of senior executives surveyed rated their change-management initiatives successful. Moreover, 65 percent reported that “change fatigue” among employees is a significant problem—one that ultimately can be attributed to a lack of sponsorship, leadership and overall deficiencies in the change-management program.

Minding The Gap:
Early and often is the key to addressing this issue. A formal strategy for managing change—beginning with an executive sponsor and a change-leadership team working with key stakeholders—should be developed early and integrated fully into program design and decision making protocols. The change message should be broadcast and reinforced throughout the entire implementation process. In addition, that communication from the initiative’s sponsor should be tailored to that sector and company. For example, for the geo-exploration division of an oil and gas company, the users are often located all over the world in places like Norway, the United Kingdom and the Gulf of Mexico. Consequently, they may not all know the same upper-level executives. In situations like this it’s important to have an executive sponsor from the line of business and a change champion or local leader from either each geographic region, or from the region that earns the most revenue.

Last, project managers (PMs) and their assistants need to push back if they’re not receiving the executive sponsorship they deem is necessary. PMs and their managers can accomplish this pushback by clearly flagging this need within their risk registers or risk-reporting processes.

Challenge 3 The Over Customization Pitfall

Technology solutions can’t please everyone all of the time. A major issue that commonly stalls a technology implementation is the inclination to over-customize the solution to meet each group’s expectations. However, expanding customization—like “scope creep”—can be difficult to manage, exceed your implementation budget and make future upgrades more complicated. It also may reflect user resistance to new business processes, putting more pressure on the change-management program.

Most organizations do need to customize their technology systems, at least to some degree. A 2013 study by Panorama Consulting Solutions (“2013 ERP Report: Organizational Change and Business Process Management”) found that 90 percent of ERP system implementations incur at least minor customization. Nearly one-quarter of implementations involved “significant” customization, the study revealed. A disproportionate focus on technology issues at the expense of business objectives as the implementation unfolds can also cause a project to derail. McKinsey and Co. cites the case of a bank that wanted to overcome inconsistencies among its business-unit data, finance data and risk data by creating a centralized data warehouse. The project eventually failed when the team concentrated solely on developing an IT architecture solution instead of addressing the business goals. The project ballooned, became unnecessarily complex, and was shut down after 18 months and investments totalling almost $10 million.
Minding The Gap:

The best solution for over-customization is a strong executive sponsor that communicates left, right and upward when the scope is finalized. Furthermore, having a hands-on executive sponsor can help remove roadblocks to a successful implementation prompted by over-customization. In sectors infamous for having robust IT governance structures such as banking, having more than one executive sponsor can sometimes be the most valuable tool for a successful technology implementation. In other more technical sectors like engineering, health or manufacturing, it sometimes helps to have one sponsor from the line of business and one with specific industry expertise.

Additionally, the level of customization can be kept under control beginning in the requirements process with comprehensive input from stakeholders and users, effective project management and governance, and keeping the practice tightly aligned with business goals and values.

Challenge 4 Driving User Adoption

All of the tips provided so far have been to mitigate one of the largest nightmares shared by most project managers: Going live with a new service or tool while lacking total end-user adoption. A common reason behind this issue is not minding the first three gaps listed, as well as not understanding end user needs early in the project lifecycle.

Minding The Gap:

Regardless of your industry, there are four key ways (bit.ly/1VpJ12u) to facilitate the adoption:

- Communicate the “Why” and “What’s in It for Me,” often referred to as WIIFM.
- Create super-users and change-champions of the new product or tool.
- Where applicable, “eat your own cuisine” by using the software for workflow and business processes. This helps set the example.
- Once live, ask end users for feedback. This will make them feel included in the process and it will improve future iterations of the tool or service.

Challenge 5 Not Enough R&R

Too often organizations dive into technology projects without first conducting a stakeholder analysis and assigning roles and responsibilities to each group and each corresponding participant for the planned initiative and implementation. Whether in oil and gas, finance or retail, the more attention paid in identifying the roles of each stakeholder, the smoother the execution and transition of the project. A successful stakeholder list should perform two functions:

- Successfully map everyone that will need to know, help and approve the development of the tech product.
- Provide the platform to engage your most important base. To perform this function, assigning the roles and responsibilities is a crucial next step.

Minding The Gap:

According to the Maryland State non-profit website (bit.ly/1A1yGR9), there are four important strategies to use for buy-in and commitment. Build a stakeholder list that helps:

- Keep the communication channel open.
- Make end users feel like they’re part of the process.
- Keep stakeholders involved in the communication process from the very beginning.
- Involve stakeholders in the strategic planning process to help the organization to successfully move toward a better implementation and sustainability of their mission.
Challenge 6 Insufficient Testing

In today’s budget-tight, speed-sensitive environment, testing is usually one of the first parts of a project plan where project managers tend to shave off a little cost. In sectors currently undergoing fiscal challenges, such as oil and gas, restraining this impulse is particularly important in achieving a successful implementation.

Often, project managers think that careful design and coding of software can make the project perfect and eliminate the need for additional testing phases. It is crucial, however, to resist this impulse. According to the IBM Corp. study, “Minimizing Code Defects to Improve Software Quality and Lower Development Costs” (ibm.co/1XZCoGW):

Minimizing defects is one of the most effective ways to keep development costs down, which is a priority for just about any organization. And because the cost of fixing defects increases exponentially as software progresses through the development lifecycle, it’s critical to catch defects as early as possible. The costs of discovering defects after release are significant: up to 30 times more than if you catch them in the design and architectural phase. This cost savings can have resonating effects in sectors like oil and gas where departments often depend on each other to accomplish their tasks. For example, if a Big Data tech push goes bad in a seismic analysis, this can balloon up into delays in trap analysis and, ultimately, oil well design.

Minding The Gap:
The key to this issue is to test often and test early. Additionally, it’s important to note that testing goes beyond code. It’s important to understand how the technology impacts processes, people and existing tools and techniques. The result of this type of “wider-net” testing may result in a better understanding of other systems, or the need for more integration with other systems.

Challenge 7 Improper Timelines

Most project managers build their Gantt charts, a commonly used way of illustrating project schedules, backward. They start with the date their managers told them the product has to be completed and retro-engineer the entire solution, including milestones and key deliverable dates. In truth, they would often be better served using a crystal ball to pick their dates. When applied to the timeline, this propensity can have negative consequences and often leads to missed milestones and delayed launch dates.

Minding The Gap:
The key to appropriate timeline planning is to build the timeline after the funding is approved and in the beginning of the project lifecycle. It’s easier said than done in large part because once the funding is approved, and project is greenlit, the first thing management asks for is the timeline.

Thus, it should be communicated early to the executive sponsors and key stakeholders that the exact timeline needs be delivered later rather than sooner. It’s also important to get buy-in on the need to address issues as they appear rather than in future iterations.

A timeline can even be created in PowerPoint instead of the more detailed Microsoft Project program, but that general timeline needs to have a large “DRAFT” in red ink at the top.

Challenge 8 Reporting Deficiency

Although working backward isn’t effective when building timelines, it’s often the best way to build reporting. Too often, project managers don’t spend enough time on conceptualizing the data to capture when reporting to managers, executives, peers and colleagues. Yet reporting can make a key difference in the funding of future product iterations and in achieving the sponsorship needed for a successful implementation in the current version. Additionally, the need for better specification and reporting of implementation strategies is a critically overlooked issue within many industries. As the study, “Implementation Strategies: Recommendations for Specifying and Reporting” (1.usa.gov/1NTY0Fn), from the National Institutes of Health pointed out: “Implementation strategies have unparalleled
importance in implementation science, as they constitute the ‘how to’ component of changing healthcare practice.’

The study describes how poor specification and reporting of implementation strategies are often the norm that adds to the loss of time and money.

**Minding The Gap:**
The best way to mitigate this issue is to use your robust stakeholder analysis as a roadmap for targeted reporting, and in the creation of audience-specific implementation strategies. Realize there might be a group that will have a more difficult time with the new product and make sure to identify that group on the stakeholder analysis.

Likewise, by flagging executive management, middle management and technical stakeholders, you can isolate who will need detailed reports of the initiative and who will just need the key highlights. Take this segmentation one step further by adding the line of business of each group and you can tailor your reporting to show the data pertinent to that specific group; in other words, ROI and nancials for the nance team, customer satisfaction and net-promoter results for the marketing team.

**Challenge 9 Sector By Sector Play On Success Metrics**

One common misconception is that every sector shares a common set of success metrics. It’s important for project managers to be aware of their industry-specific success metrics. Knowing these metrics is crucial in driving adoption.

For example, one success metric that often exists in finance and retail that doesn’t often exist in energy or manufacturing is customer retention. Sometimes referred to as churn, this key retention metric represents the probability that someone will stop being a customer.

**Minding The Gap:**
The challenge of determining the most effective industry-based and corporate-specific success metrics is as simple as understanding what the key issues of the sector and company are. It’s important to remember this task and also remember if you move to another sector to learn what their common success metrics look like. Broadly speaking, metrics can help evaluate the status of the ongoing project in terms of schedule, cost and profitability; anticipate any potential risks; deal with issues and problems before they become severe; keep track of project profitability; assess the productivity of the implementation team; provide an ongoing evaluation of the quality of work products to be delivered. Last, share the burden of the work by assigning various stakeholders the responsibility for determining what metrics should be used for success.

**Challenge 10 A Smooth Transition**

Handing of the newly built service or tool to the organization or group that will maintain the technology is too often addressed late in the project lifecycle and is commonly associated with mismanagement and cost inefficiencies.

It’s important to understand, early in the project planning, the actual cost of training and on-going operational expenses associated with maintaining the tool or service. This issue must include two areas that are often overlooked in the planning:

- An understanding of the vendors that will play a role in the continuation of the service.
- And a cursory understanding of the work it would entail to modernize the technology in the future.
Performing these planning activities can help in the implementation by mitigating service interruptions that arise from unexpected costs once your product goes live. Remember that to achieve true implementation adoption, the end user must have access to the product as much as possible. Service interruptions could dampen utilization and slow adoption.

**Putting It All Together**

You don’t have to fear the gaps, just mind them. Most managers know that the strategic implementation of technology projects is critical to their organizations’ high-performance objectives. But they don’t have to struggle to bridge the gap between strategic IT formulation and its day-to-day deployment. By developing a clear scope and success criteria, and aligning projects to organizational strategy with sound change-management program and related skills, IT projects can gain a better chance of successful completion and adoption, and can be delivered on-time and on-budget.
About Avtex

Avtex is a full-service Customer Experience (CX) consulting and solution provider focused on helping organizations create better experiences for their customers. With an unparalleled breadth of knowledge and experience, and partnerships with leading technology vendors like Microsoft and Genesys, we are uniquely suited to address any CX challenge.

Our portfolio of solutions and services supports our unique approach to Customer Experience, which includes two key phases, CX Transformation and CX Orchestration.

- Our **CX Transformation** solutions and services aid in the process of defining and improving CX. From Journey Mapping to CX Design Thinking, we provide the support you need to set the foundation for CX success.

- Our **CX Orchestration** solutions and services enable the realization of your CX strategy through people, processes and technology. From technology implementation to training, we ensure you have the capabilities to execute your CX strategy.