

Working in a virtual world  
Establishing highly effective  
virtual teams on information  
technology projects



**Introduction:**

In today’s economic climate, organizations are increasingly selective when making large-scale investments in technology. Once committed to making a technology investment, Chief Information Officers’ next concern is delivering high-quality return on investment. Successfully implementing a technology solution is a challenge and the effectiveness of the project team is a critical factor. Leveraging offsite resources on technology projects is a growing trend and opportunity; however, this team structure adds layers of complexity to delivering a successful implementation.

As a systems integration partner, clients often come to us with questions about distributed team structures.

- Common questions include:
1. What type of savings can be attained by using a virtual team? What type of investment do I need to make?
  2. Are there some “bare minimums” that I can implement or do I need to jump on the virtual bandwagon?
  3. How will offsite resources learn about my business? How will they teach my employees about the system that we will eventually own and maintain?
  4. How do we stay connected across the miles and time zones?
  5. How can I establish the quality of work being done elsewhere?

In response, we embarked on our own investigation of what makes virtual teams effective on Information Technology projects. Through a series of interviews and focus groups with project managers who have led successful virtual teams, we concluded that while deploying technology with a virtual team can be an effective strategy, the team design requires strategic planning and execution in order to achieve desired results.

Challenges lies in overcoming the restrictions of physical distance: communication breakdowns; lack of collaboration; dissimilar talent management practices; as well as, difficulty building trust and overall team cohesiveness. This can be difficult on technology projects that are typically high-burn initiatives, with long hours and complex design

and implementation strategies. These projects also require a high degree of daily collaboration on requirements, design, and testing, as well as ongoing management of issues, risks, and defects. The virtual barriers of time and space can distance colleagues or discourage effectively sharing information, collaborating, and making timely decisions.

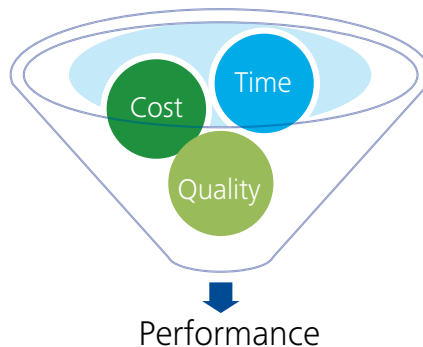
The focus of this paper is on exploring key teaming levers that create high performing virtual teams, enable teams to maintain high quality standards, and address how virtual teams can support the success of a technology implementation.

**Deloitte’s Point of View:**

“Decentralizing project teams can increase innovation, offer cost reduction opportunities, and potentially speed up delivery timelines.”

**Why Virtual Teams?**

If implementing a virtual team adds complexity to an already complex equation, why invest in this type of team structure? Most organizations measure project team performance by cost, time, and quality. Decentralizing a technology project team can offer opportunities to save on time and costs, and still achieve quality results. Staffing strategic roles with talent from other locations or countries is a popular strategy.



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**Cost.** Depending on the structure of the virtual team, there may be opportunities to optimize value at a reduced budget. For example, companies can incur lower costs per hour by strategically determining the work, activities, and roles better performed offshore, e.g. unit and system testing. Projects can also reduce travel expenses by limiting the travel onsite to short-term, strategic rotations.

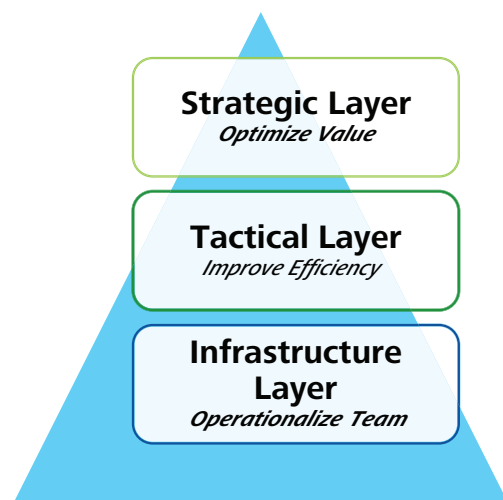
**Time.** Increasing productive work hours is a substantial benefit to virtual teaming. Offshore resources can be leveraged to allow US-based project teams to span multiple time zones. With virtual teams strategically located around the world, companies can implement a “follow-the-sun” strategy that engages technology teams around the clock.

**Quality.** Tapping into a worldwide talent pool enables companies to build teams to suit, whether that means assembling a team for experience, specialization, or value. The sourcing of experienced, talented, and offsite resources mitigates quality risks and concerns and can drive greater innovation.

### Layered Approach to Virtual Teams

When thinking about how to staff and run a virtual project team, think in terms of three layers.

- The first and most critical layer is the **Infrastructure Layer**, which enables a virtual team to operate collectively.
- The second is the **Tactical Layer**, where key levers are implemented to achieve immediate or day-to-day gains in team effectiveness.
- The final layer is the **Strategic Layer** that includes components that can optimize the value of the virtual team.



While the Infrastructure Layer is necessary to determine the minimum amount of team function, the Tactical and Strategic Layers are highly recommended to maximize the value that virtual teams offer. The foundational and tactical virtual teaming decisions are better made before onboarding the team such that the team is connected and prepared to work collaboratively upon day one. However, the Strategic Layer involves aligning projects’ virtual teaming approach with strategies and plans across many project discipline and throughout the project life cycle.

During the initial phase of a technology project, there may be limited offsite involvement during which time project leadership can determine which of the levers are relevant for their engagement. During the design, build, and operate phases of an implementation, there is significant collaboration between onsite and offsite team members. This makes it important to have the Infrastructure Layer established and the Tactical Layer levers that better fit the project identified and implemented by the time the project reaches the design phase.

### Infrastructure Layer

Technology projects with team members in multiple physical locations cannot function without standard infrastructure elements in place to enable basic communication. The levers within the Infrastructure Layer enable day-to-day

#### Case Study: Regional Healthcare Insurance Provider

A large US regional healthcare insurance provider was undergoing a system modernization program and migrating their core administration system. A cross national team was established with 27 team members based in Mumbai, India. With much of the team a world away the program leadership determined that a proactive and structured approach to the integrated working environment would help to mitigate potential project alignment risks. To assist in the integration and ensure that the team was highly functioning, the program:

- Formalized the onsite/offshore delivery process including roles and responsibilities
- Involved key client stakeholders in decision making regarding the standards and processes of working with the offshore resources
- Clearly defined the deliverables of both the onsite and the offshore resources
- Developed a communications plan for the project team to ensure that all parties are getting the messaging they need at the right time and in the right way
- Established regular (at least weekly) touchpoints between the onsite and offshore teams to provide visibility of the tasks planned and accomplished

communication and collaboration between individuals and groups.

Projects must provide multiple communication channels to support varying communication needs. The need to communicate within a technology team ranges from daily status calls, to sharing work products, to 1-on-1 issue resolution discussions. Each scenario may require a different medium to support the conversation including conducting meetings over telephone using a teleconference account, sharing deliverables through email and an online document repository, and communicating 1-on-1 with a colleague over instant messenger.

In addition, all members of a technology project must have access to the corporate network and systems, with requisite speed and bandwidth, to enable them to work within secure testing environments, shared workspaces, and document repositories.

Beyond technology, it is also important to clearly outline the team structure, processes, and roles, in order to reduce ambiguity and align expectations.

#### Top Infrastructure Levers that Make Virtual Teams Operational on a Technology Project

1. **Hardware:** Personal computer, modem, telephone, headset, webcam, polycom
2. **Software:** Email, instant messenger program, online meeting program
3. **Communication Accounts and Access:** Internet, teleconference accounts, mobile phone accounts
4. **Virtual Private Network (VPN):** Remote access to systems behind local firewalls
5. **Shared Document Repository:** Project site (such as eRoom or Sharepoint) for 24/7 access to documents
6. **Standard Templates and Processes:** Standard formats of project templates; standardized processes for escalating risks and issues, status reporting, assignment of activities and duties, etc
7. **Team Structure and Roles:** Defined reporting structures and sub-team definitions; clearly defined, documented, and communicated roles and responsibilities (or RACI matrix)
8. **Meeting Schedule:** Regularly occurring team meetings for sharing information between onsite and offsite teams

#### Tactical Layer

After the infrastructure is in place and the virtual team is operational, projects can begin to implement tactical plans that will increase overall team efficiency. These tactics are small-scale actions that provide immediate and noticeable gains for the project and team, enabling enhanced daily communication and promoting collaboration across workstreams, physical locations, and time zones.

Many of the levers in the Tactical Layer establish deliberate communication and collaboration mechanisms for the project team. Virtual teaming requires different communication tactics to achieve the value derived from in-person communications. Team members who are co-located can easily stop by each other's desks or engage in a brief 1-on-1 conversation after a team meeting. On virtual teams, members must work daily to overcome time and space barriers and there are numerous successful ways to do this.

#### Case Study: Regional Healthcare Insurance Provider

A large logistics management company was implementing an ERP system over the course of several years with an onsite team of approximately 50 members and a significant off-shore contingent which peaked at 100 team members. The project knew that virtual teaming would be a key component, not just in the short-term, but over the life of the project. Quality was considered table stakes – there were already processes and technology in place to support both the client's and Deloitte's offsite teams. In order to take it to the next level, the project was looking for longevity – keeping the offsite team members onboard and engaged over several years and maintaining consistency of the team. To do this, the project put a focus on building individual relationships with the offsite team:

- Team lead visits to the offsite locations to jump start the relationship and "put a face to the name"
- Training the team on available tools, such as video conferencing, that allowed for face-to-face interaction
- Providing offsite team members opportunities to present at all-hands meetings and lunch-n-learn sessions
- Rotating offsite team members onsite at appropriate points in the project
- Assisting offsite team members to drive their careers through formal performance management and informal mentoring

Virtual teams can overcome the “time” barrier by establishing work schedules in all locations that allow 2-4 hours off overlapping schedules. During these shared hours, teams should schedule the gamut of team meetings, establishing that these meetings occur regularly and are inclusive of all involved and impacted. Projects may underestimate the importance of involving all effected team members, including off-site resources, in original conversations, assuming a report-out of outcomes can be sufficient. This should be the exception and not the rule. It is preferred to include all team members, when feasible, to increase the feeling of inclusiveness and mitigate the risk that the conversations (and outcomes of the conversations) are not disseminated properly or get lost in translation.

Virtual teams should not discount the importance of face-to-face interactions with the client and the onsite team. In order to provide opportunities for these types of interactions, teams may consider rotating offsite resources onsite to enable them to have client-facing interactions and get to know the rest of their team in person. After the rotation, these resources are often more effective due to deeper relationships with the client and the team. The same need for face-to-face interaction can be addressed by having leaders travel offsite to meet and engage with offsite resources. This provides an opportunity for team leaders to share their vision in a more compelling, personal manner than would be possible on the phone, which can help inspire offsite team members.

A virtual team may have team members located in different countries or different parts of one country, so it is important that team members are aware of the different cultures represented on the team and how these differences may impact norms and working styles. Consider, for example, a country where most of the workforce takes a break from work in the middle of the afternoon, or a country where the workforce generally takes five weeks of vacation at one time. Although it is especially important for team leaders to understand the various cultural norms on their team, it benefits all team members, both onsite and offsite, to have a greater awareness of the culture norms that may impact work styles and interpersonal dynamics.

Having confidence that co-workers will deliver their work on-time is a fundamental trust-building factor. Managers should consider building into work plans gate work products or deliverables. This practice enables close monitoring of progress and helps team members depend on the co-workers who meet these milestones. Team members

are more likely to trust those who deliver on time and meet quality standards.

#### Top Infrastructure Levers that Make Virtual Teams Operational on a Technology Project

1. **Work Hours:** Establish overlapping work hours to increase real-time communication
2. **Frequent Check-ins:** Establish daily (regular) meetings and provide templates for how to report status; embed additional gates into workplan (periodic reviews of work products and deliverables)
3. **Rotations:** Establish rotations for bringing offsite team members onsite
4. **Leadership Visits:** Visits by project leaders to offsite locations increases morale and speeds team-building
5. **Collaboration Tools:** Establish collaborative workspaces and use video conferencing as often as possible; train team members on leading practices for using the tools
6. **Cultural Awareness:** Provide cultural awareness training
7. **Offsite Team Leadership:** Formally establish leaders within the offsite team structure
8. **Interpersonal Connections:** Establish a culture for 1-on-1 communication

#### Strategic Layer

Once infrastructure and tactical levers are in place, project leaders can consider additional factors to optimize the value the virtual team can provide. Keeping virtual teaming considerations in mind when planning and executing throughout a project can increase efficiency and increase the benefits of virtual teams.

An important consideration is the types of activities that will be executed offsite. Take advantage of opportunities to leverage offsite teams to execute select tasks and activities. Determining the activities that do not require regular onsite business input is an important consideration when developing various project plans. Those activities may better be suited for the team members who are not onsite. Whereas, activities such as requirements gathering, requires the involvement of the business and it is preferred to be performed onsite. Once this is determined you can develop the proper governance structure for the overall team – this includes examining what the onsite and offsite balance should be. Though offsite resources can provide cost savings on an hourly rate basis it is not ordinarily wise to overload a team with offsite resources. If a team is not

familiar with working in a virtual environment it may be better to take it slow and transition work over the course of the project.

Projects with large percentages of dispersed resources must consider how this impacts timelines, hand-offs, reviews, distribution of duties, and possibly even scope. Some activities have traditionally required in-person interaction with business SMEs, however, with offsite resources, alternative strategies for executing those activities should be pre-planned and documented. When working with a virtual team it is crucial to recognize that approach might need to be modified from what is typically done to be successful. For example, modifying the testing approach for a largely offsite team may involve reducing the involvement of business SMEs in the first few rounds of testing.

#### Strategic Levers for Optimizing the Value of Virtual Teams on Technology Projects

1. **Team Structure:** What is the right balance of onsite and offsite resources for this project
2. **Project Management:** Determining which tasks and duties are better done offsite; can reporting be done offsite; how will the offsite team provide status
3. **Project Timeline and Scope:** Where can scope be expanded or the project timeline be decreased by using offsite resources
4. **Knowledge Transfer:** Plan for how to consistently transfer knowledge to offsite resources and back to the onsite team and client; development of SMEs – onsite technology expertise, offsite business specific knowledge
5. **Cost Savings:** Identify tasks that would save costs by being executed by offsite lower cost resources
6. **Competency Development:** Utilize the offsite resources to develop managerial skills and experience of onsite team members

#### Summary

Building a virtual team for a technology implementation project can provide significant opportunities. In order to establish that these teams are successful, a critical first step is determining the technology and tools that the program will use to facilitate communications and collaboration up-front. Technology planning must account for everything from basic infrastructure to innovative tools that enhance frequent communications. Basic infrastructure considerations should include establishing stable phone and internet connections for all team members and obtaining the necessary access to document repositories, intranet sites, testing environments, and IT support resources.

Many organizations are also using team collaboration tools, such as online white boarding, shared applications, and team workspaces, enabling dispersed employees to work together more effectively. Furthermore, forward-looking organizations are adopting social media tools, such as blogs, podcasts, and wikis to help teams collaborate. A virtual team requires not only the right infrastructure, but also a communications plan that describes the tools team members can use to communicate and sets expectations for when to use each.

As organizations face increasing cost pressures and are compelled to demonstrate greater return on many investments, they require more effective ways to deliver difficult and costly technology implementation projects – both quickly, and without sacrificing quality. Virtual teaming can help organizations do just that. Although virtual teams add another layer to the complexity of technology projects, the benefits to successfully deploying with a virtual team are well worth it.

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