The Paradox of Agile Project Management and Virtual Teams
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How is agile project management performed in the context of virtual teams? Can agile project management be used in conjunction with virtual teams? Isn't this an oxymoron? Aren't they incompatible? If they are compatible, what are the principles, practices, tools, and techniques for applying agile project management to virtual teams?

This is a controversy that's been raging for at least a decade (i.e., the application of agile project management and virtual teams). There are no simple answers to these questions. In fact, this is a quandary that predates the advent of formalized models of agile project management. It often manifests itself in the form of controversies surrounding outsourcing in-general.

Sometimes, it manifests itself in the form of the debate surrounding the use of multinational, global, international, and transnational business partnerships, alliances, and other relationships. It goes by many names, such as distributed teams, global teams, and even off-shoring. However, the latter are a special case of virtual teams, so let's just focus on the basics.

Agile project management is a contemporary approach or model of project management. It is a relatively new paradigm for managing high-risk, time-sensitive, and research and development-oriented new product and service-oriented development projects. That is, it's an approach for initiating, planning, executing, monitoring, controlling, and closing highly-volatile projects.

Agile project management emerged to help overcome the challenges of rapidly developing complex new products and services in the face of dynamic and uncertain market conditions, the exponential rate of technological change, ever increasing competitive threats, and seemingly insurmountable risks, in order to satisfy enterprise, organization, and firm-level needs today.

So then, what is a virtual team? Lipnack and Stamps define a virtual team as a group of people who interact through interdependent tasks guided by a common purpose that works across space, time, and organizational boundaries with links strengthened by webs of communication technologies. Jaya Ahuja describes virtual teams in terms of the following criteria:

- Communicating via technology.
- Collaborating with people who you've never met face-to-face.
- Communicating with people who speak different languages (geographical dispersion).
- Working from places other than physical offices (home-based telecommuting).
- Working asynchronously (often at different times and in different time zones).
- Belonging to multiple teams (within the same project or across multiple projects).

Basically, virtual teams are project members who are geographically distributed. They could be in different offices within the same building, different buildings on the same campus, or different parts of a city, state, country, or the globe. Virtual teams are the polar opposite of project teams whose members are physically collocated in one office, often with synchronized work schedules.

Project teams are traditionally collocated to ensure optimal project performance, outcomes, and success. There are a variety of benefits to collocated teams. Face-to-face communication is contextually rich, which leads to stronger team identity, cohesion, and trust. High-quality communications results in greater productivity, efficiency, cost-effectiveness, quality, etc.

Virtual teams are the polar opposites of collocated teams, because they are geographically distributed. There is no rich, high-context face to face communication. Without it, performance suffers and projects cannot succeed. Originally, agile project management required collocated teams. How could a new product or service be developed in the 21st century without them?

Why would anyone want to discard the benefits of collocated teams? There are a number of reasons. There are over six billion highly-talented people in the world and it's impossible to collocate all of them. It's not possible to create a single team to develop every product or service. Most teams will need the services of virtual team members to help them solve difficult problems.

In today's environment, customer needs emerge quickly, dynamically, and unpredictably, often due to turbulent market conditions. Modern projects need to be flexible enough to adapt to their customer's rapidly changing needs. That is, virtual team members who are located across the country or across the globe may be needed to address unplanned project scope changes.

So, how does the agile project management model work? Customer needs are analyzed, valuated, and prioritized. Lightweight project plans are quickly formed. Collocated teams often meet daily or work side-by-side. New products or services are developed in small iterations, increments, and releases. Project demonstrations and retrospectives are held, and plans are adjusted accordingly.

Processes and communications are lightweight, flexible, and highly efficient. Gone are the days when the project management process itself consumed a bookshelf or a warehouse was needed to store the project documentation. The culture and attitude is one of flexibility and adaptability. Elaborate governance boards are no longer needed to prevent the project scope from change.

Collocated teams are the heart and soul of agile project management. They are the engines of innovation, creativity, and productivity. There is only one small dilemma. The world's supply of human talent is not aligned for a project management model based on collocated project teams. The marketplace is better aligned for one based on virtual teams, not collocated ones.

Practitioners and researchers have been thoughtfully and tactfully adapting agile project management for virtual teams. They realize that agile project management is better than the traditional plan and document-driven approach for developing new projects and services. However, they also realize that customers need virtual teams in addition to collocated ones.

Exactly how does one go about adapting the agile project management model for collocated teams to virtual ones? The first challenge is to acknowledge the business value of rich, high-context face-to-face communications. With that in-mind, principles, practices, and tools are needed to help ensure that virtual teams do not fail as a result of poor communication quality.

Practice	Description
Strategy	Establish clear strategic goals, objectives, plans, visions, and roadmaps
Leadership	Use charismatic, experienced visionaries who are motivated to succeed
Coaches	Use coaches and mentors to monitor and ensure the progress of teams
Kickoffs	Hold a face-to-face kickoff meeting with the team for strategic visioning
Rotations	Periodically rotate key individuals among sites throughout the project
Gatherings	Periodically bring entire team together, i.e., beginning, middle, end, etc.
Synchronous	Communicate frequently, i.e., video conferences, VOIP, phone, chat, etc.
Asynchronous	Use asynchronous technologies, i.e., email, blogs, FAQs, etc.
Collaboration	Use work flow tools, wikis, and other content management technologies

There are many other principles, practices, tools, and techniques for ensuring the success of virtual teams. Many practices have to do with globally distributed teams, where the management of cultural differences is a critical success factor. These practices focus upon minimizing time differences, ensuring cultural compatibility, and conflict management for resolving differences.

Practice	Description
Near-shore	Geographically distribute work within the same time zone if possible
Compatibility	Utilize teams that are culturally compatible as much as possible
Adaptations	Adapt project schedules for regional-level cultural observances
Retrospectives	Use retrospectives to uncover hidden problems with virtual teams
Ambassadors	Use cultural ambassadors to resolve ethnic differences
Empowerment	Empower distributed teams to have equal authority with other sites
Standardize	Train all project members in the management and development process
Follow-Ups	Follow-up distributed meetings with minutes, decisions, and outcomes
Multimedia	Use video and audio and other conceptually-rich visualizations/graphics

Regardless of whether the virtual teams are domestic or globally distributed, certain practices are suggested. These have to do with minimizing unnecessary synchronous activities, while ensuring maximum communication. It's difficult enough to get collocated teams to work the same hours. Try this with virtual teams in different time zones, especially globally-distributed ones.

Practice	Description
Collocation	Collocate distributed teams within geographic regions if possible
Decomposition	Logically decompose interrelated work to one site as much as possible
Decouple	Minimize unnecessary synchronous activities/meetings between sites
Proxies	Designate proxies to synchronize communications between sites
Meetings	Limit meetings to site leaders and other key technical personnel
Localization	Maximize teamwork, collaboration, and interaction at individual sites
Governance	Establish lightweight governance boards to synchronize standards
Automation	Ruthlessly automate all management and development processes
Integration	Use automated testing, continuous integration, and release management

Virtual teams are a cold, hard-reality in today's turbulent global economy. It's insufficient to dogmatically claim that all teams must be collocated and agile project management should not be used in conjunction with virtual teams. Many thoughtful individuals have been successfully applying the principles of agile project management to virtual teams over the last decade.

The success of agile project management as applied to virtual teams comes down to few key values: (1) top-notch leadership, (2) clear goals and objectives, (3) periodic face-to-face meetings, (4) frequent communications, (5) decoupling of distributed sites, (6) minimization of time differences, and (7) careful attention to cultural differences.

The goal is to maximize communication quality! Collocated teams would suffer for lack of communications. Agile project management approaches must be tailored to virtual teams, there is no substitute for talented individuals, and project status must be made visible to stakeholders. Agile project management has succeeded and will continue to do so, even with virtual teams.

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