



Lean & Agile Project Management

for Large Distributed Virtual Teams

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Agile Capabilities: <http://davidfrico.com/rico-capability-agile.pdf>

Agile Resources: <http://www.davidfrico.com/daves-agile-resources.htm>

Agile Cheat Sheet: <http://davidfrico.com/key-agile-theories-ideas-and-principles.pdf>

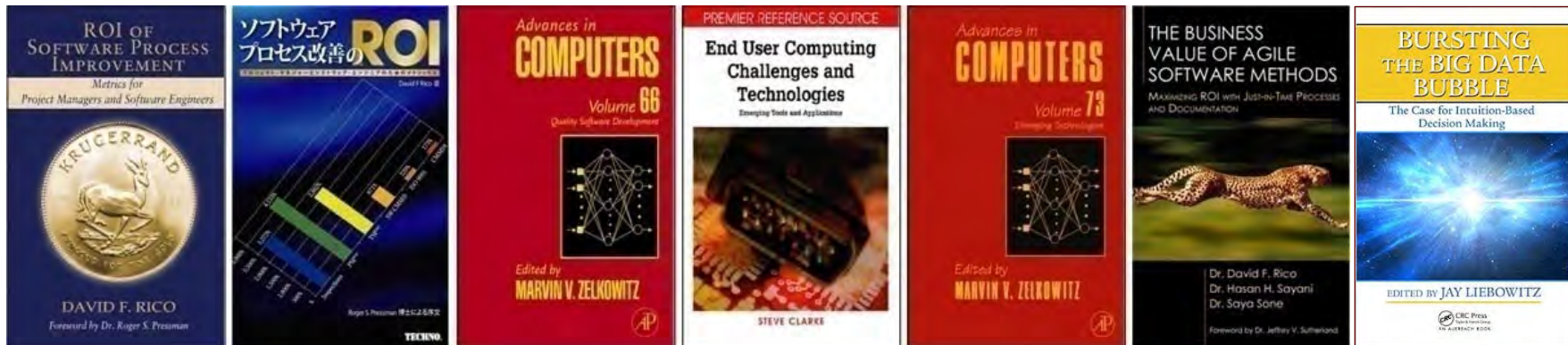
Dave's **NEW** Business Agility Video: <https://www.youtube.com/watch?v=-wTXqN-OBZA>

Dave's **NEWER** Development Operations Security Video: <https://vimeo.com/214895416>

DoD Fighter Jets vs. Amazon Web Services: <http://davidfrico.com/dod-agile-principles.pdf>

Author Background

- ❑ Gov't contractor with 34+ years of IT experience
- ❑ B.S. Comp. Sci., M.S. Soft. Eng., & D.M. Info. Sys.
- ❑ Large gov't projects in U.S., Far/Mid-East, & Europe



- Career systems & software engineering methodologist
- Lean-Agile, Six Sigma, CMMI, ISO 9001, DoD 5000
- NASA, USAF, Navy, Army, DISA, & DARPA projects
- Published seven books & numerous journal articles
- Intn'l keynote speaker, 195+ talks to 14,300 people
- Specializes in metrics, models, & cost engineering
- Cloud Computing, SOA, Web Services, FOSS, etc.
- Adjunct at 7 Washington, DC-area universities

Agenda



Intro to Agile Project Mgt.

Intro to Agile Virtual Teams

Types of Agile Virtual Teams

Practices of Agile Virtual Teams

Examples of Agile Virtual Teams

Metrics for Agile Virtual Teams

Summary of Agile Virtual Teams

What is Agility?

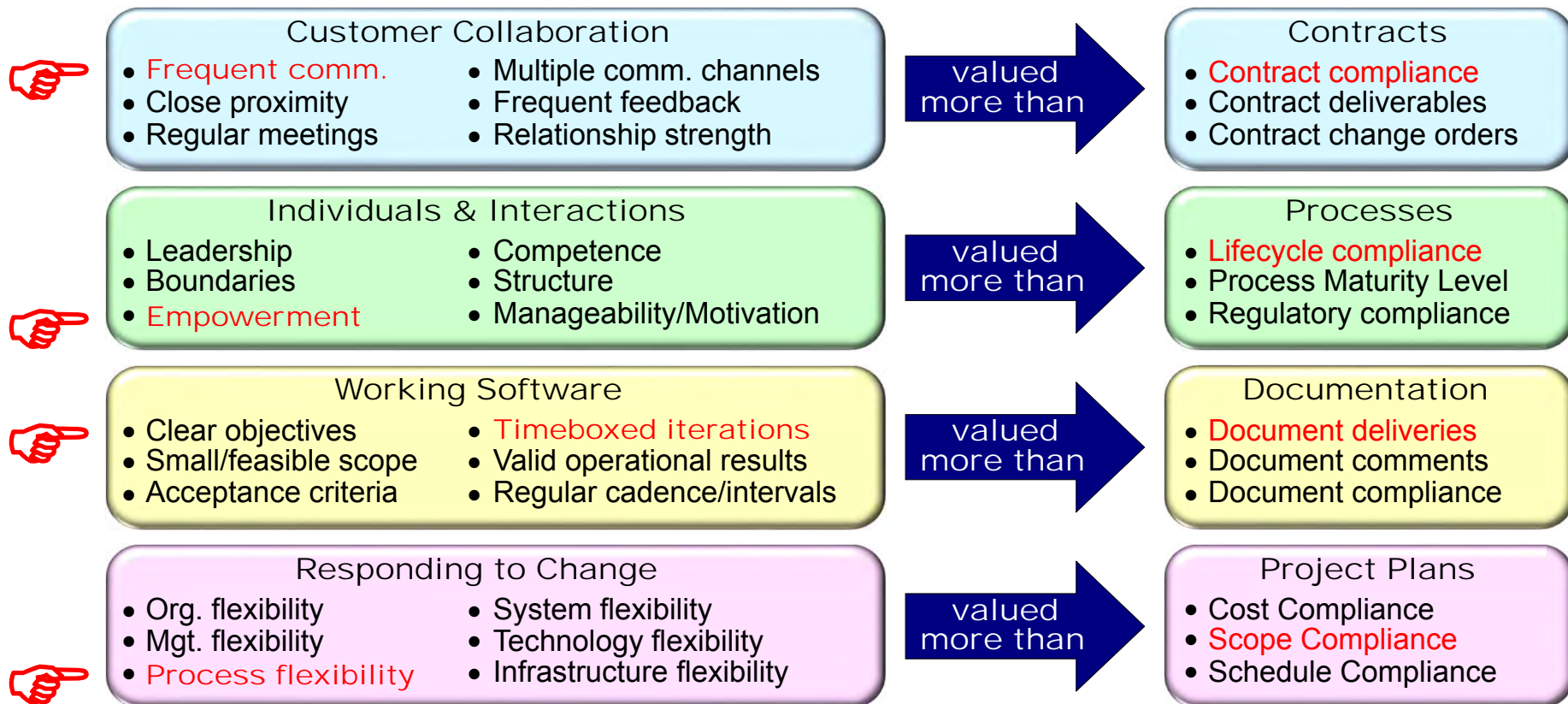


- A-gil-i-ty (ə-'ji-lə-tē) Property consisting of quickness, lightness, and ease of movement; To be very nimble
 - *The ability to create and **respond to change** in order to profit in a turbulent global business environment*
 - *The ability to **quickly reprioritize** use of resources when requirements, technology, and knowledge shift*
 - *A very **fast response** to sudden market changes and emerging threats by intensive **customer interaction***
 - *Use of **evolutionary, incremental, and iterative** delivery to converge on an optimal customer solution*
 - *Maximizing **BUSINESS VALUE** with right sized, just-enough, and just-in-time processes and documentation*

What are Agile Methods?



- ❑ **People-centric** way to create innovative solutions
- ❑ **Product-centric** alternative to documents/process
- ❑ **Market-centric** model to maximize business value



Agile Manifesto. (2001). *Manifesto for agile software development*. Retrieved September 3, 2008, from <http://www.agilemanifesto.org>
Rico, D. F., Sayani, H. H., & Sone, S. (2009). *The business value of agile software methods*. Ft. Lauderdale, FL: J. Ross Publishing.
Rico, D. F. (2012). *Agile conceptual model*. Retrieved February 6, 2012, from <http://davidfrico.com/agile-concept-model-1.pdf>

How Do Lean & Agile Intersect?



- ❑ Agile is **naturally** lean and based on small batches
- ❑ Agile directly **supports** six principles of lean thinking
- ❑ Agile may be **converted** to a continuous flow system

Agile Values	Lean Pillars	Lean Principles	Lean & Agile Practices	Flow Principles
Empowered Teams	Respect for People	Relationships	<ul style="list-style-type: none"> • Customer relationships, satisfaction, trust, and loyalty • Team authority, empowerment, and resources • Team identification, cohesion, and communication 	Decentralization
Customer Collaboration		Customer Value	<ul style="list-style-type: none"> • Product vision, mission, needs, and capabilities • Product scope, constraints, and business value • Product objectives, specifications, and performance 	Economic View
		Value Stream	<ul style="list-style-type: none"> • As is policies, processes, procedures, and instructions • To be business processes, flowcharts, and swim lanes • Initial workflow analysis, metrication, and optimization 	WIP Constraints & Kanban
Iterative Delivery	Continuous Improvement	Continuous Flow	<ul style="list-style-type: none"> • Batch size, work in process, and artifact size constraints • Cadence, queue size, buffers, slack, and bottlenecks • Workflow, test, integration, and deployment automation 	Control Cadence & Small Batches
		Customer Pull	<ul style="list-style-type: none"> • Roadmaps, releases, iterations, and product priorities • Epics, themes, feature sets, features, and user stories • Product demonstrations, feedback, and new backlogs 	Fast Feedback
Responding to Change		Perfection	<ul style="list-style-type: none"> • Refactor, test driven design, and continuous integration • Standups, retrospectives, and process improvements • Organization, project, and process adaptability/flexibility 	Manage Queues/ Exploit Variability

1
2
3

Highsmith, J. A. (2002). *Agile software development ecosystems*. Boston, MA: Addison-Wesley.

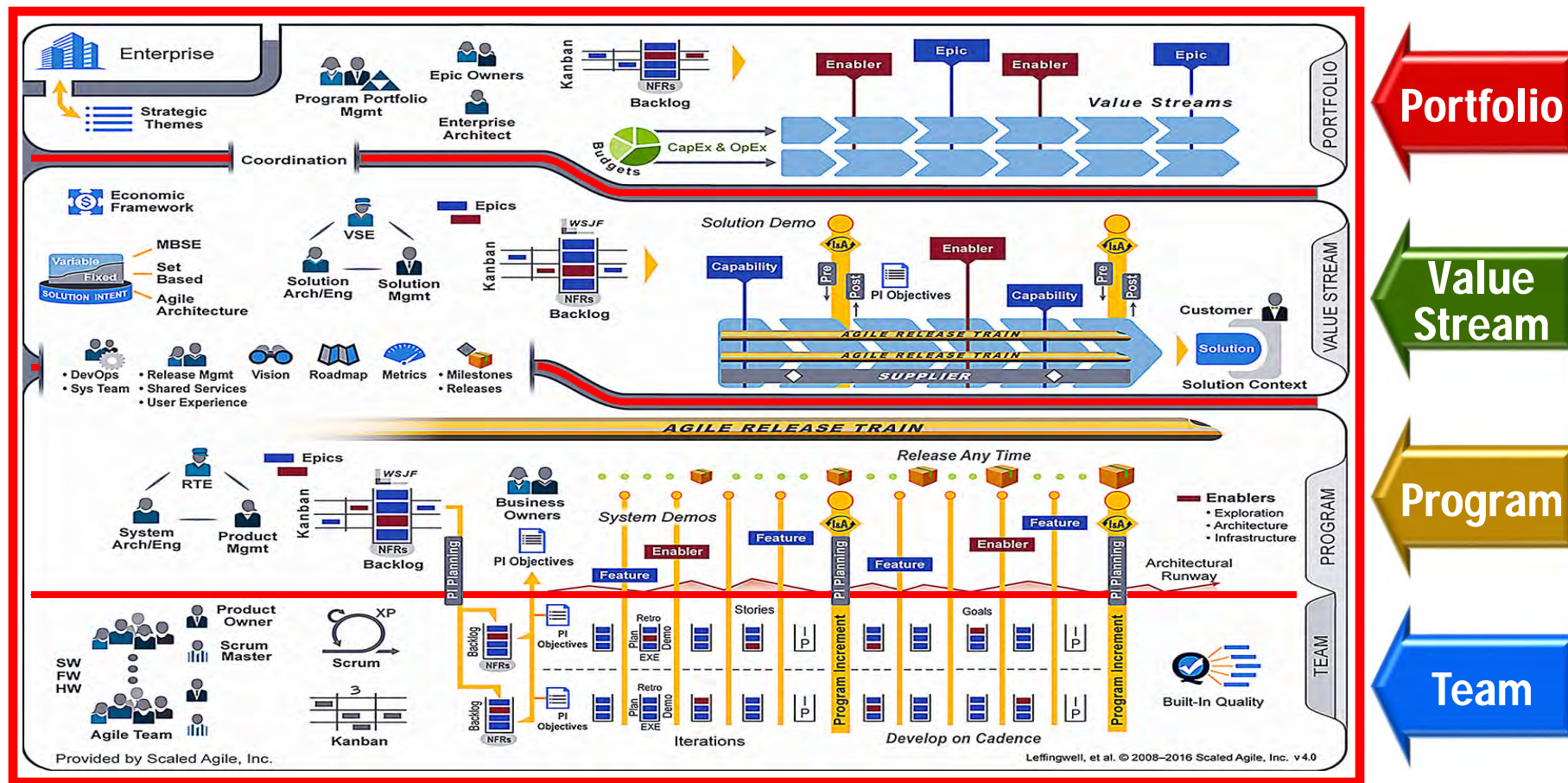
Larman, C., & Vodde, B. (2008). *Scaling lean and agile development: Thinking and organizational tools for large-scale scrum*. Boston, MA: Addison-Wesley.

Womack, J. P., & Jones, D. T. (1996). *Lean thinking: Banish waste and create wealth in your corporation*. New York, NY: Free Press.

Reinertsen, D. G. (2009). *The principles of product development flow: Second generation lean product development*. New York, NY: Celeritas.

Agile Enterprise Delivery Model

- ❑ Begins with a high-level product vision/architecture
- ❑ Continues with needs development/release planning
- ❑ Includes **agile delivery teams** to realize business value



Beck, K., & Fowler, M. (2001). *Planning extreme programming*. Upper Saddle River, NJ: Addison-Wesley.

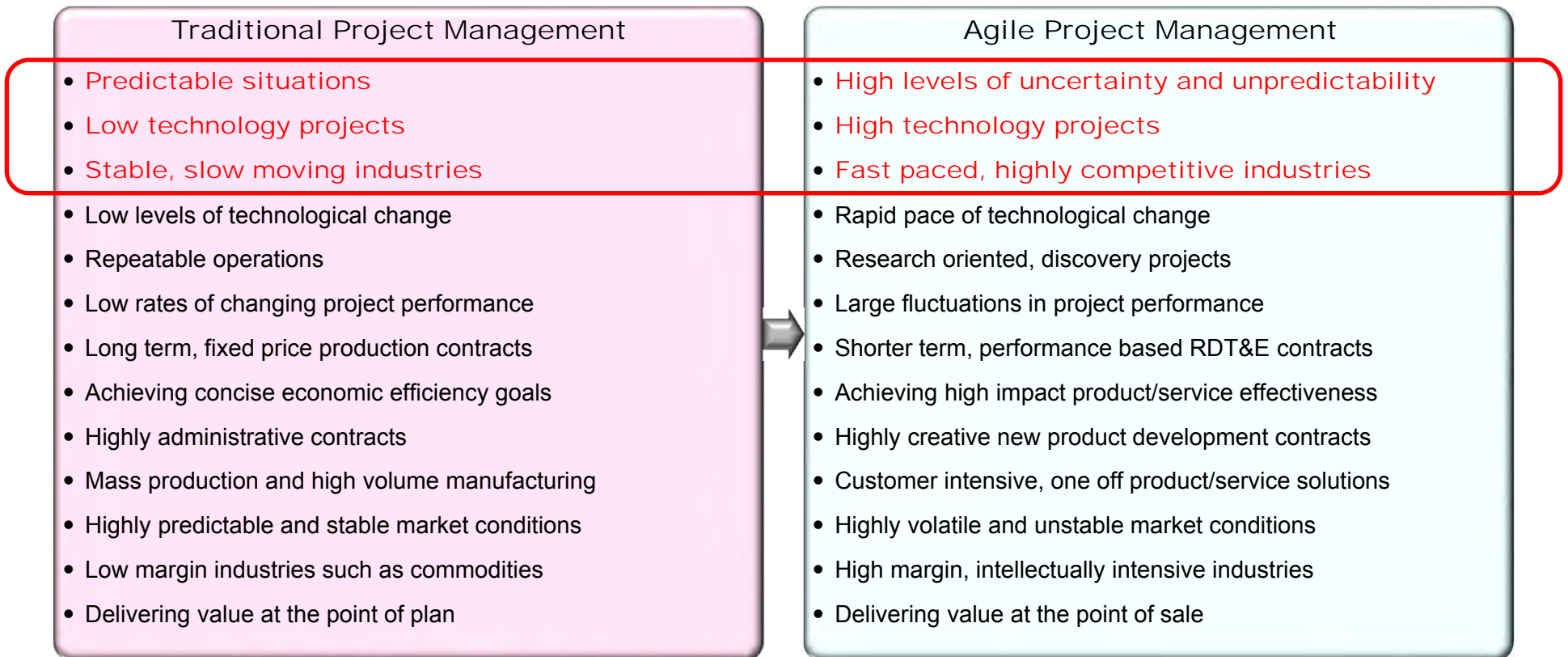
Highsmith, J. A. (2010). *Agile project management: Creating innovative products*. Boston, MA: Pearson Education.

Larman, C., & Vodde, B. (2010). *Practices for scaling lean and agile development*. Boston, MA: Addison-Wesley.

Leffingwell, D. (2011). *Agile software requirements: Lean requirements practices for teams, programs, and the enterprise*. Boston, MA: Pearson Education.

When to use Lean/Agile Proj. Mgt.

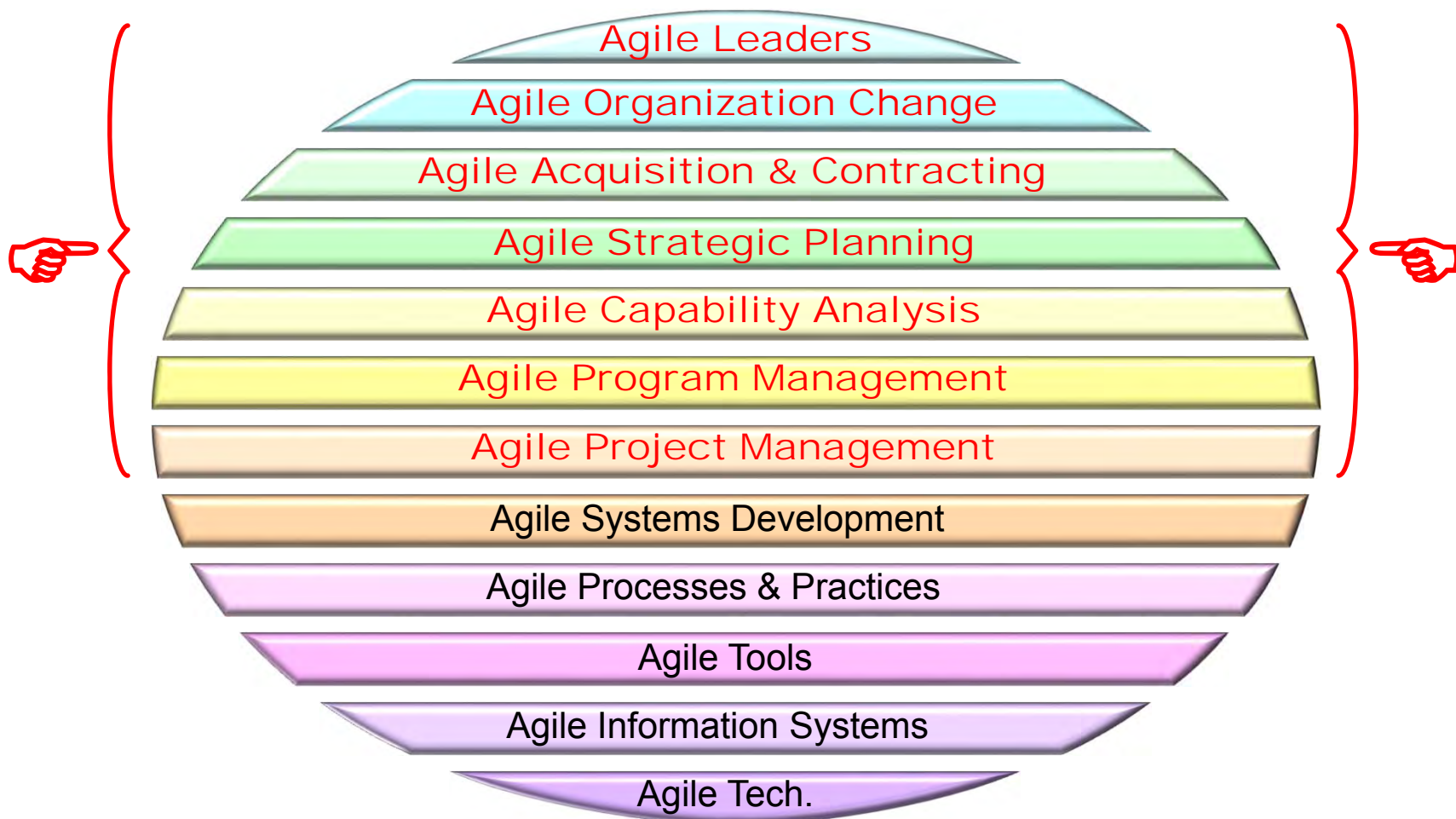
- ❑ Exploratory or research/development projects
- ❑ When fast customer responsiveness is paramount
- ❑ In organizations that are highly innovative/creative



Agile World View



- ❑ “Agility” has many **dimensions** other than IT
- ❑ It ranges from **leadership** to **technological** agility
- ❑ The focus of this brief is **program management** agility



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What are Virtual Teams?



- ❑ Virtual teams are often non-collocated project teams
- ❑ Often communicate using asynchronous technology
- ❑ Geographically and sometimes nationally dispersed

Traditional vs Virtual	Zigurs 2003	Curseu 2008	Schlenkrich 2009	Ahuja 2010
Collocated vs distributed	✓	✓	✓	✓
F2F vs electronic collaboration	✓	✓	✓	✓
Different vs similar goals		✓	✓	
Similar vs different hours			✓	✓
Similar vs diverse culture			✓	✓
Same vs different organization			✓	
Specialized vs cross functional			✓	
Single vs multiple teams			✓	✓
Static vs shifting teams			✓	✓
Office bldg vs telecommuting				✓

Zigurs, I. (2003). Leadership in virtual teams: Oxymoron or opportunity? *Organizational Dynamics*, 31(4), 339-351.

Curseu, P. L., Schalk, R., & Wessel, I. (2008). How to virtual teams process information? *Journal of Managerial Psychology*, 23(6), 628-652.

Schlenkrich, L., & Upfold, C. (2009). A guideline for virtual team managers. *Electronic Journal of Information Systems Evaluation*, 12(1), 109-118.

Ahuja, J. (2010). A study of virtuality impact on team performance. *IUP Journal of Management Research*, 9(5), 27-56.

Why Use Virtual Teams?



- ❑ Oft cited benefit of virtual teams is reduced expenses
- ❑ Access to global talent pool is probably best reason
- ❑ Other advantages such as cycle time are oft cited

Advantage of Virtual Teams	Bergiel 2008	Labrosse 2008	Shachaf 2008	Kuruppuarachchi 2009	Siebdrat 2009
Reduced operating expenses	✓	✓		✓	✓
Utilize global talent pool	✓	✓	✓	✓	✓
Staffing flexibility		✓		✓	
Improved productivity		✓		✓	
Workforce diversity	✓	✓		✓	✓
Reduced travel expenses	✓	✓		✓	✓
Faster cycle time			✓	✓	✓
Better work life balance				✓	
Reduced environmental footprint		✓			
Improved business advantage	✓	✓		✓	✓

Bergiel, B. J., Bergiel, E. B., & Balsmeier, P. W. (2008). Nature of virtual teams: A summary of their advantages and disadvantages. *Management Research News*, 31(2), 99-110.

LaBrosse, M. (2008). Managing virtual teams. *Employment Relations Today*, 35(2), 81-86.

Shachaf, P. (2008). Cultural diversity and information and communication technology impacts on global virtual teams. *Information & Management*, 45(2), 131-142.

Kuruppuarachchi, P. R. (2009). Virtual team concepts in projects: A case study. *Project Management Journal*, 40(2), 19-33.

Siebdrat, F., Hoegl, M., & Ernst, H. (2009). How to manage virtual teams. *MIT Sloan Management Review*, 50(4), 63-68.

What are the Pitfalls?



- ❑ Culture and language difference most oft cited pitfalls
- ❑ Time zones and communications are frequently cited
- ❑ Lack of visioning, context, and requirements are key

Disadvantage of Virtual Teams	A	B	C	D	E	F	G	H	I	J
Cultural differences	✓	✓	✓	✓		✓			✓	✓
Language differences		✓	✓	✓			✓		✓	✓
Time zone		✓	✓	✓		✓			✓	
Coordination breakdown	✓		✓	✓				✓		
Lack of visioning			✓	✓				✓	✓	
Technology issues			✓	✓	✓				✓	
Loss of communication richness	✓	✓	✓							
Loss of team cohesion	✓			✓						✓
Lack of trust			✓	✓		✓				
Lack of F2F communications			✓						✓	✓
Ambiguous requirements				✓		✓		✓		

Alves, C. H., et al. (2008). A qualitative risk model for offshoring IT applications. *IEEE SIEDS Conference, Charlottesville, Virginia, USA*, 317-322

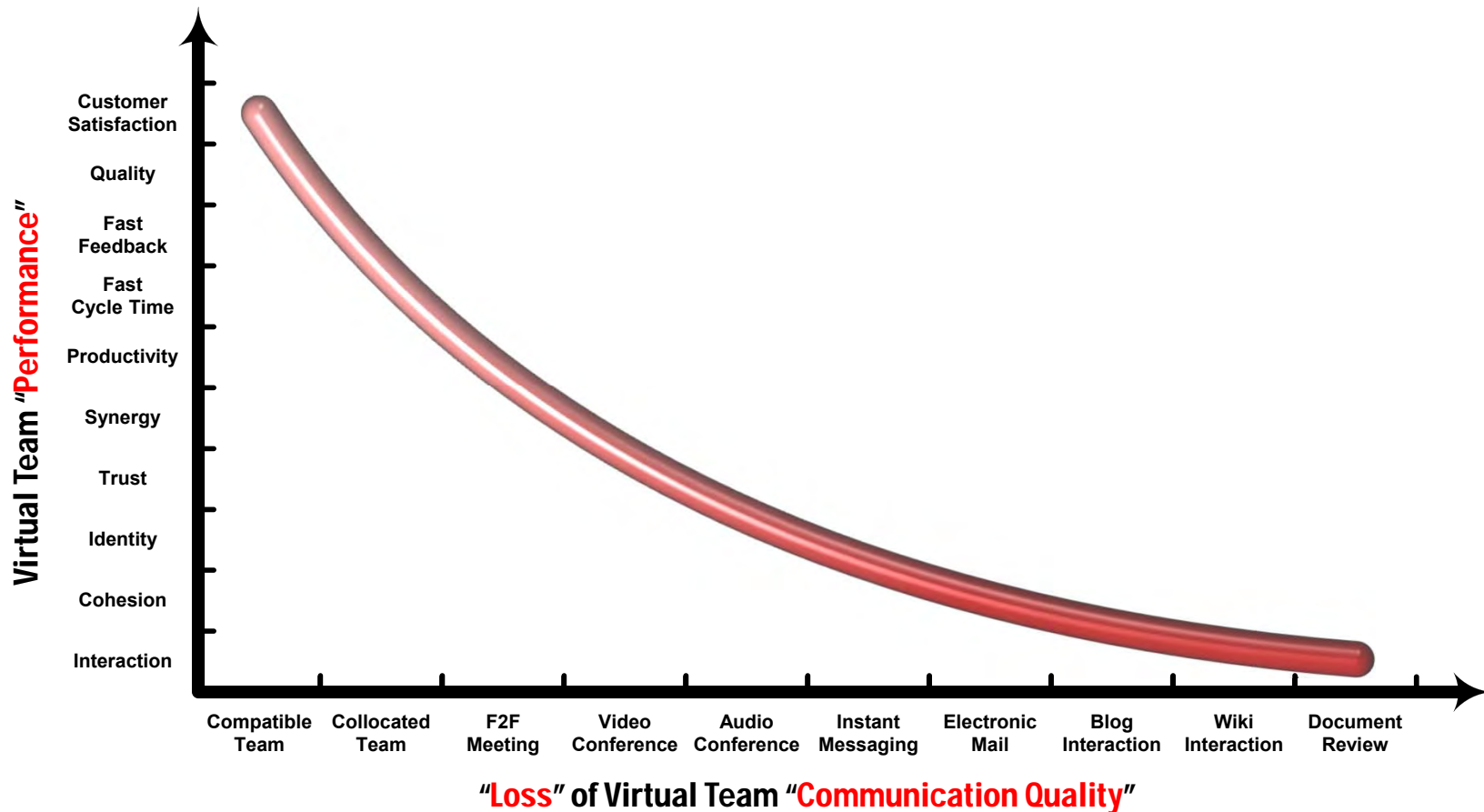
Chatfield, A. T., & Wanninayaka, P. (2008). IT offshoring risks and governance capabilities. *41st HICSS Conference, Waikaloa, Hawaii, USA*, 436-444.

Yalaho, A., & Nahar, N. (2008). Risk management in offshore outsourcing of software projects. *PICMET Conference, Cape Town, South Africa*, 1721-1748.

What is the Paradox?



- ❑ Collocation & F2F interaction are a means to success
- ❑ Virtual teams communicate less undermining success
- ❑ Low productivity, quality, customer satisfaction results



Rico, D. F. (2010). The paradox of agile project management and virtual teams. *Gantthead*.

Carmel, E. (1999). *Global software teams: Collaborating across borders and time zones*. Upper Saddle River, NJ: Prentice-Hall.

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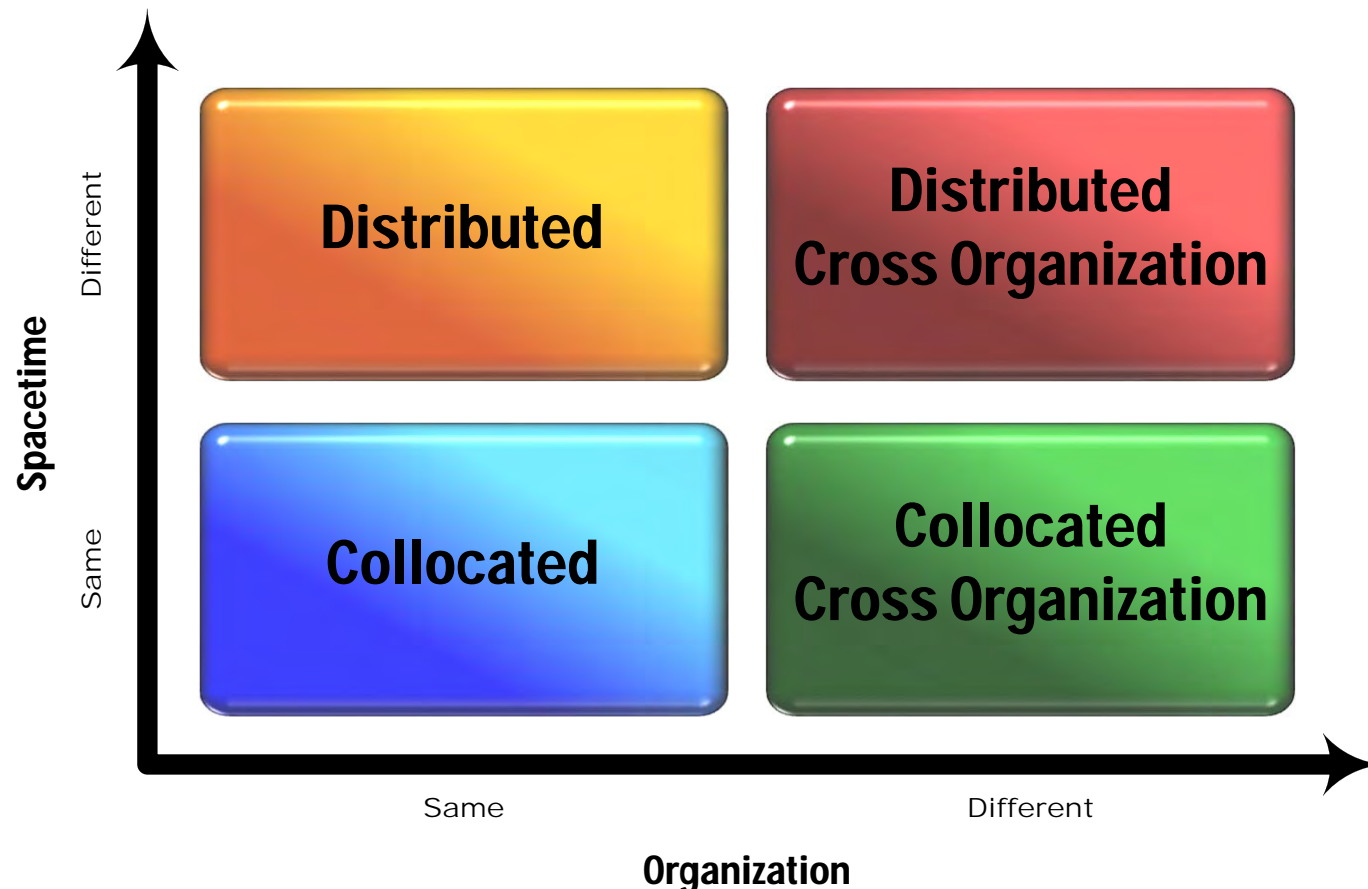
Metrics for Agile Virtual Teams

Summary of Agile Virtual Teams

Basic Varieties of Teams



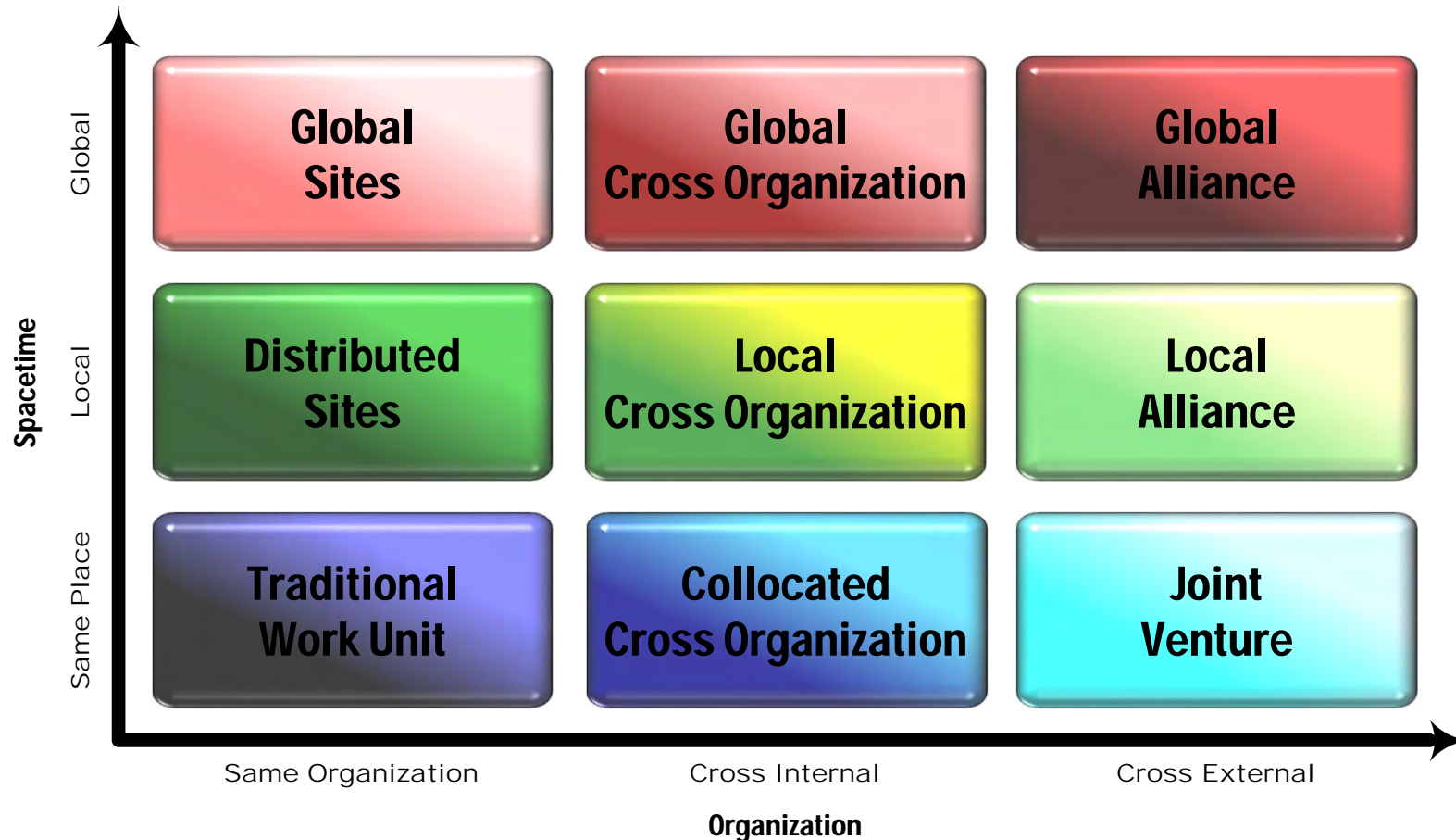
- ❑ Lipnack created a model for virtual teams in 1997
- ❑ Distribution & organization are its major dimensions
- ❑ Distributed, cross organizational teams most complex



Varieties of Virtuality



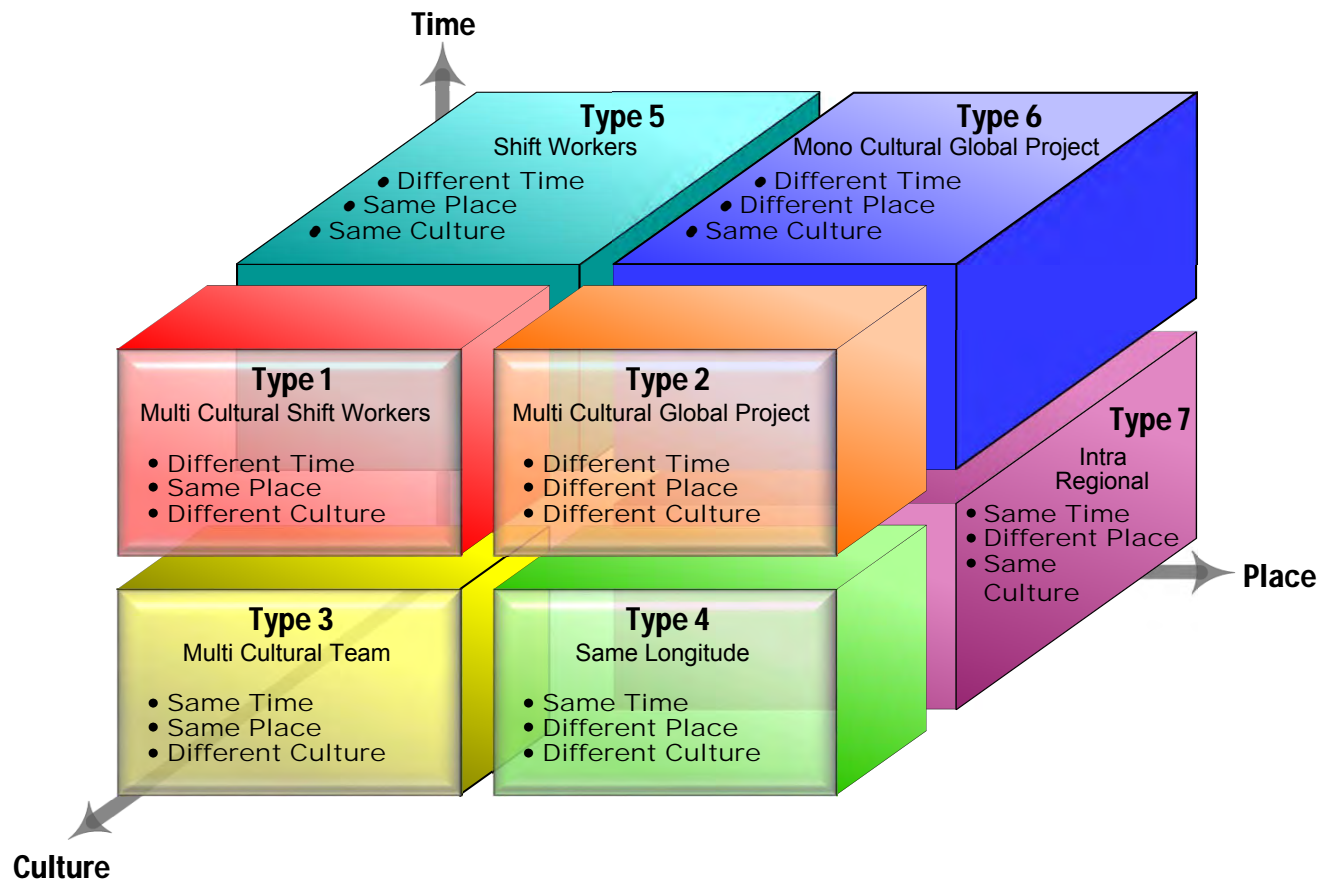
- ❑ Lipnack extended her model for virtual teams in 2000
- ❑ Included notion of external joint ventures & alliances
- ❑ External, global alliances are most complex types



More Varieties of Virtuality



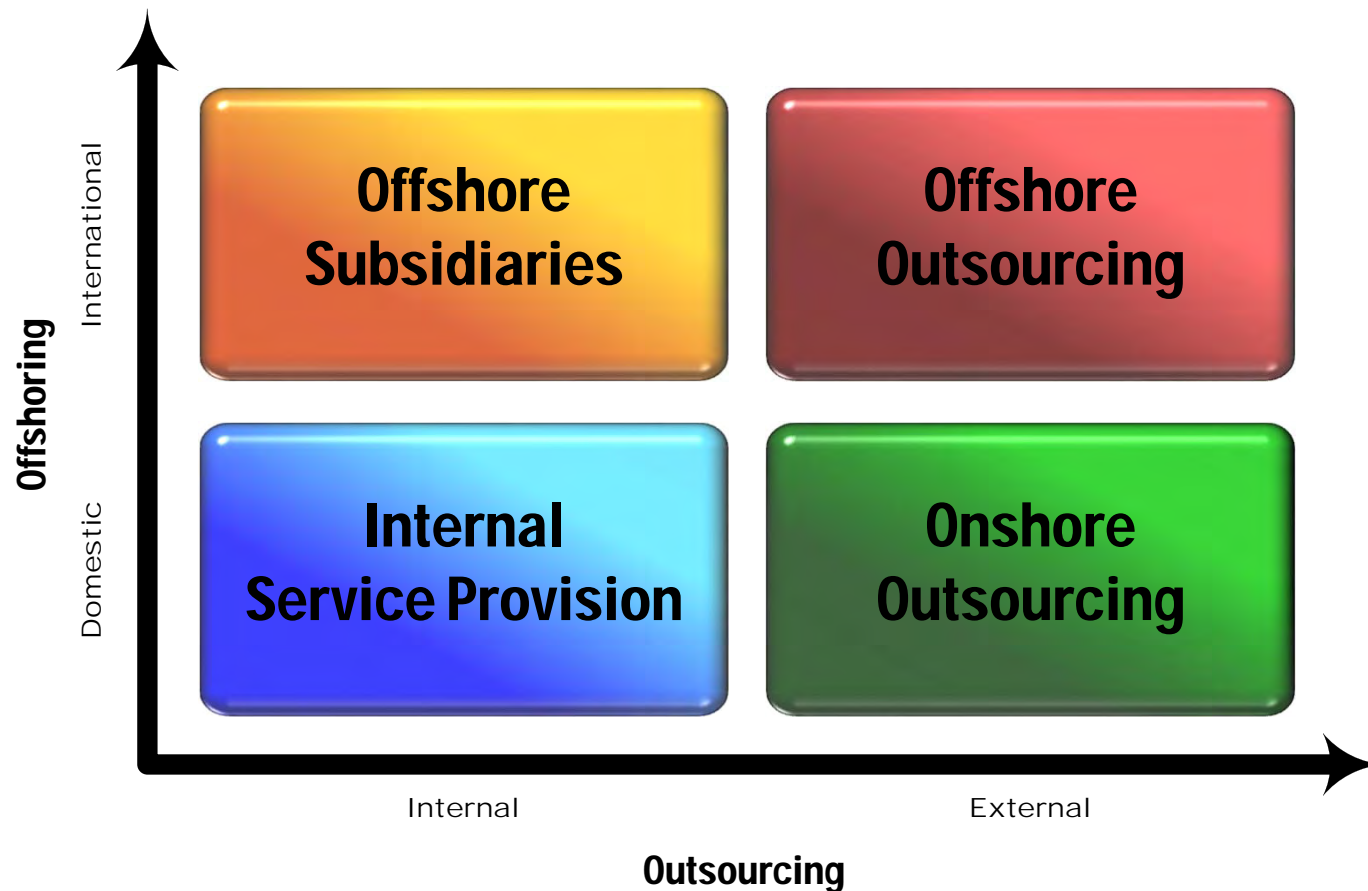
- ❑ Fisher developed a three dimensional model in 2001
- ❑ Includes the dimensions of time, place, and culture
- ❑ Type 2 multi cultural projects are most ambitious



Outsourcing vs. Offshoring



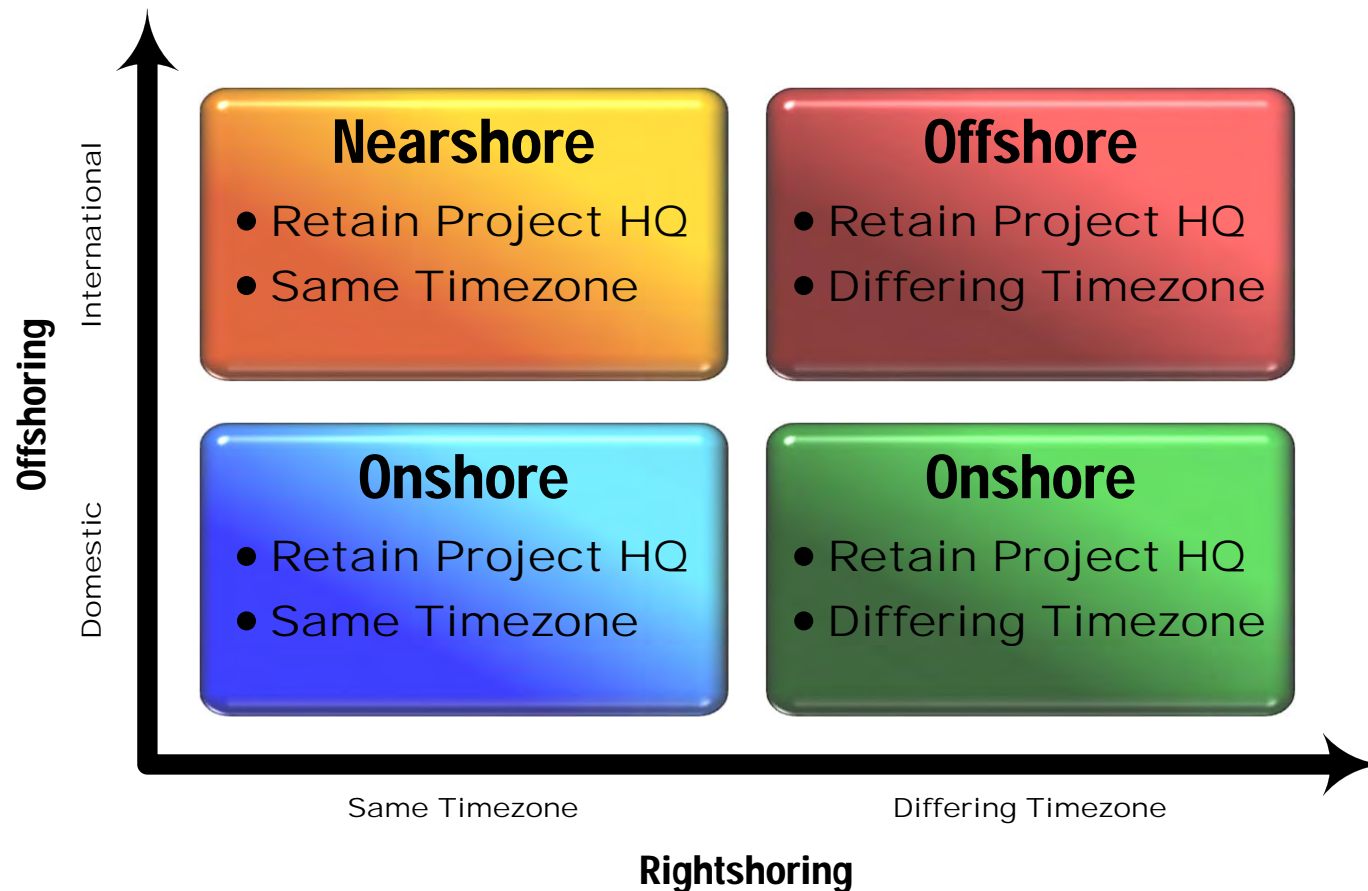
- ❑ Schaaf compared outsourcing vs. onshoring in 2004
- ❑ His model disambiguates outsourcing vs. onshoring
- ❑ Combining outsourcing & offshoring is the riskiest



Rightshoring vs. Offshoring



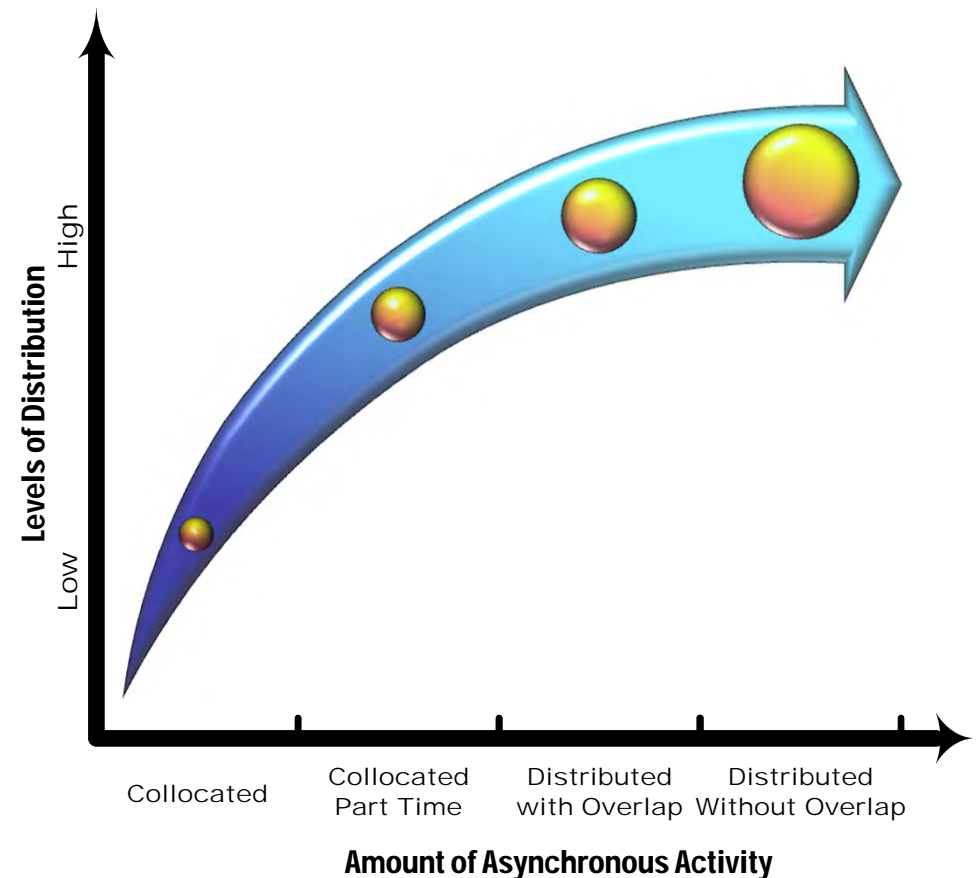
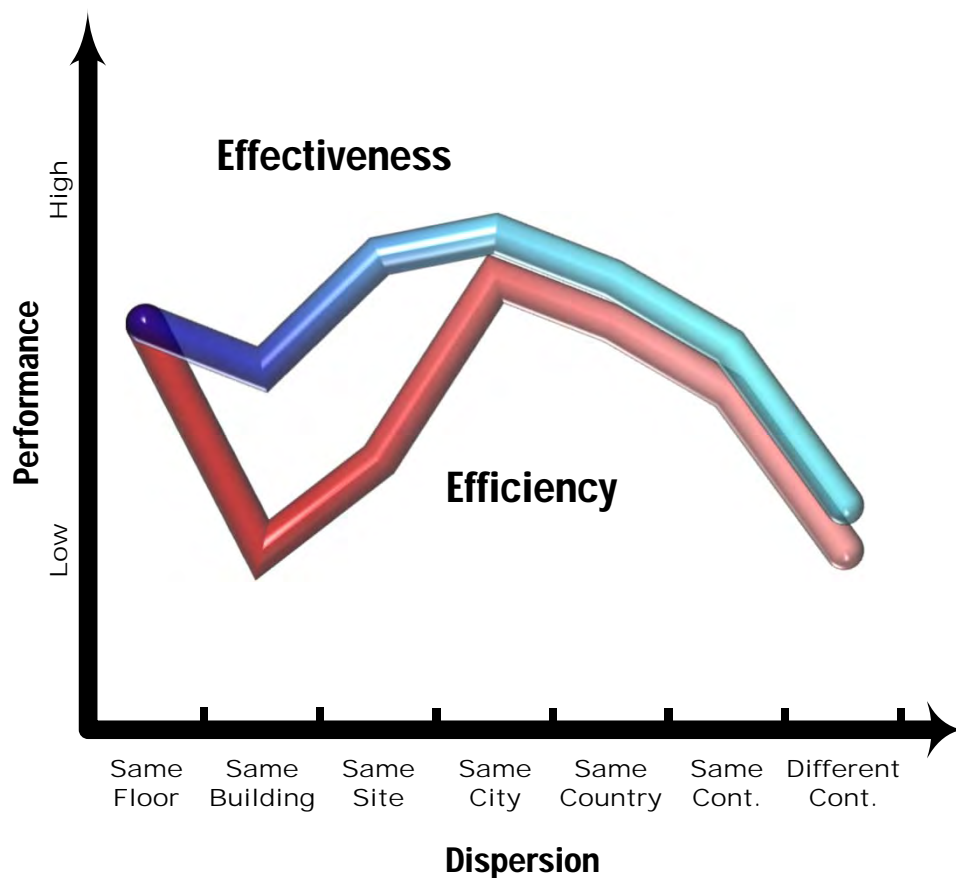
- ❑ Hendel introduced the concept of rightshoring in 2004
- ❑ There are alternatives to just onshoring vs. offshoring
- ❑ A popular notion is to nearshore to similar timezones



Team Dispersion



- ❑ Siebdrat simplified types of virtual teams in 2009
- ❑ Woodard made basic model of agile teams in 2010
- ❑ Both agree **hi-synchronicity** is necessary to succeed



Siebdrat, F., Hoegl, M., & Ernst, H. (2009). How to manage virtual teams. *MIT Sloan Management Review*, 50(4), 63-68.

Woodward, E., Surdek, S., & Ganis, M. (2010). *A practical guide to distributed scrum*. Indianapolis, IN: IBM Press.

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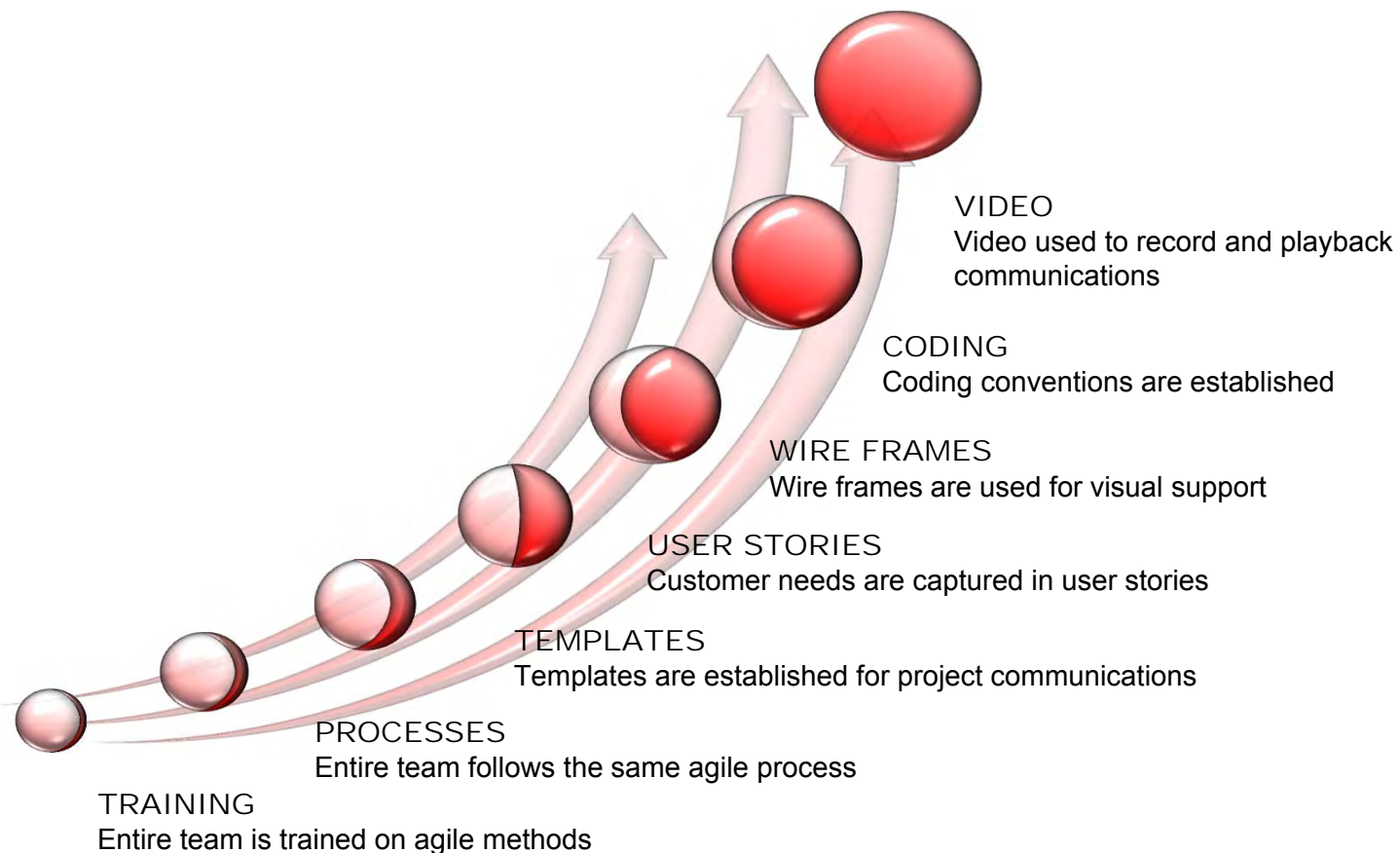
Metrics for Agile Virtual Teams

Summary of Agile Virtual Teams

Standard Practices



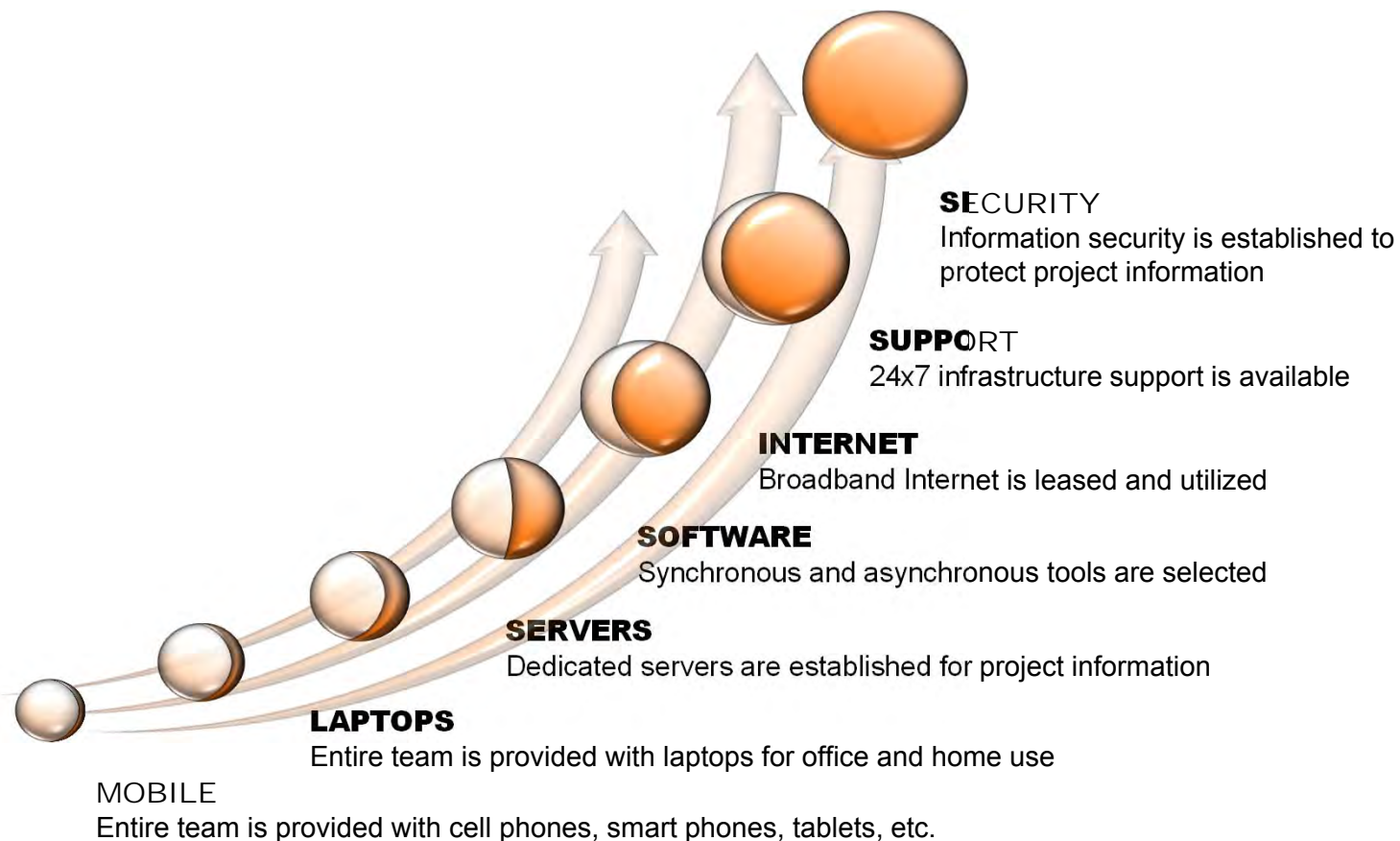
- ❑ Standard practices is an oft cited aid to virtual teams
- ❑ Agile methodologies are not known in every country
- ❑ Training should be provided and standards created



Virtual Infrastructure



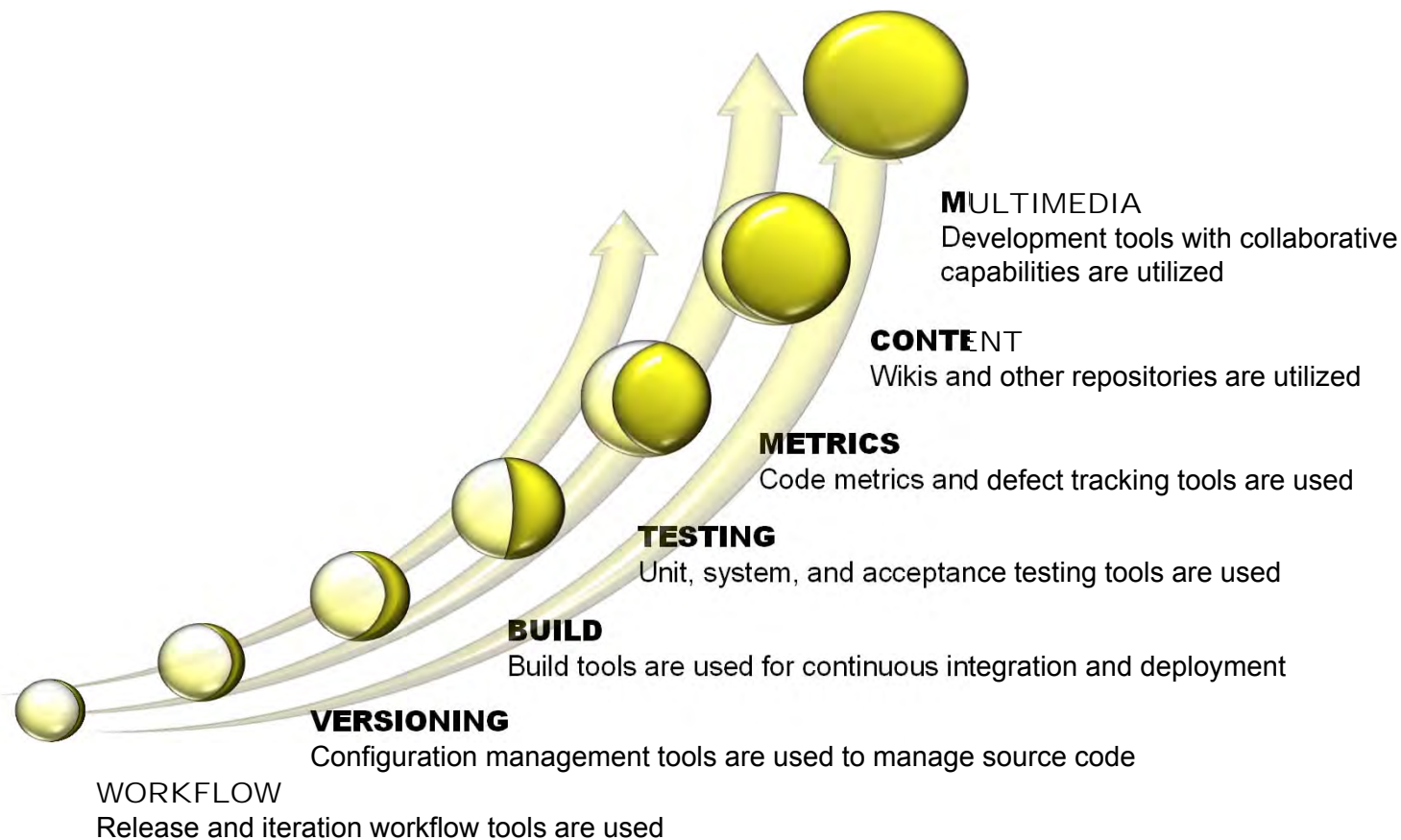
- ❑ Infrastructure needs are most often overlooked
- ❑ Many countries do not have adequate computers
- ❑ Internet service is also a luxury in across the globe



Virtual Tools



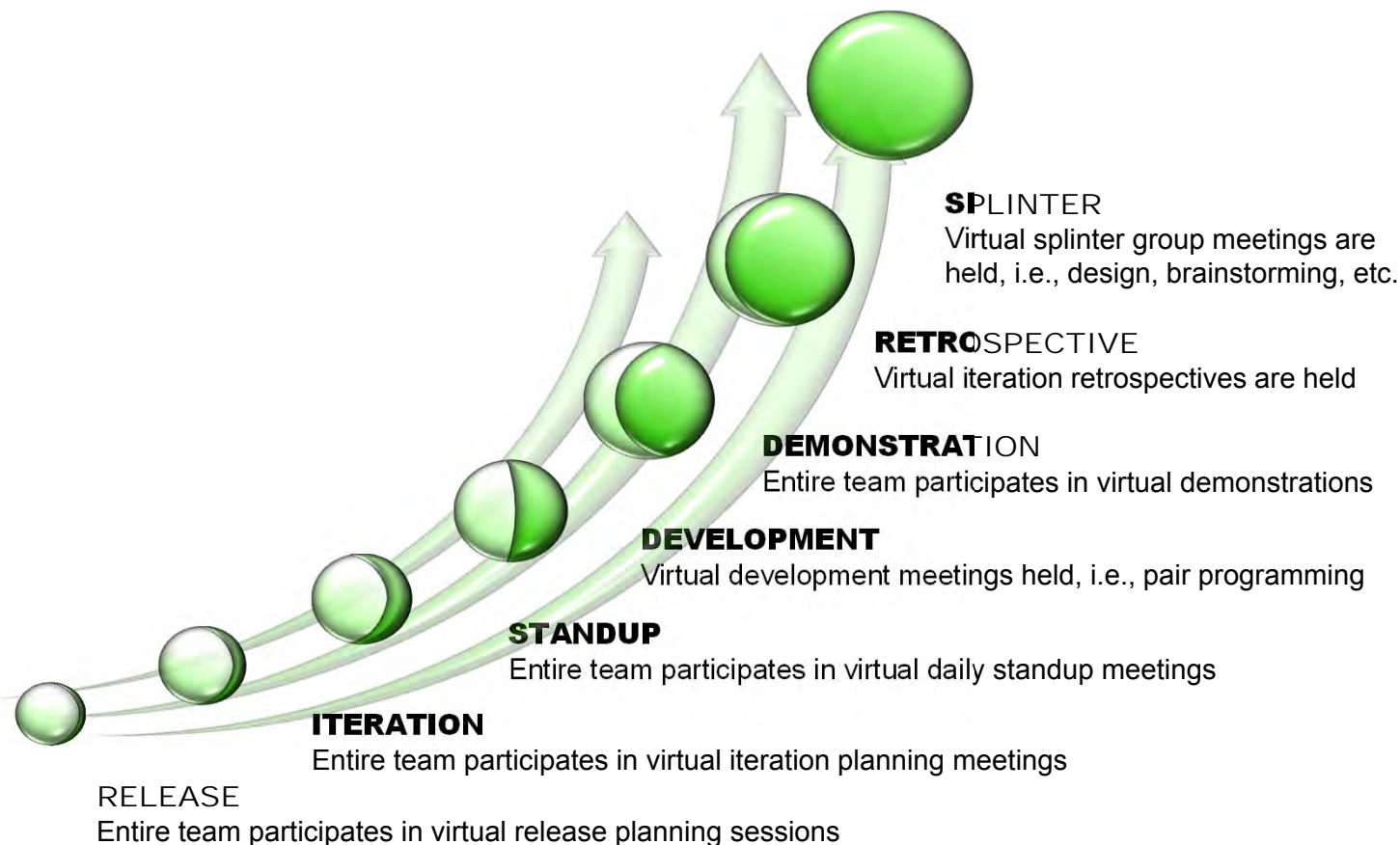
- ❑ Many projects do not standardize development tools
- ❑ Complete development tools are easy to assemble
- ❑ Development environments should be integrated



Virtual Meetings



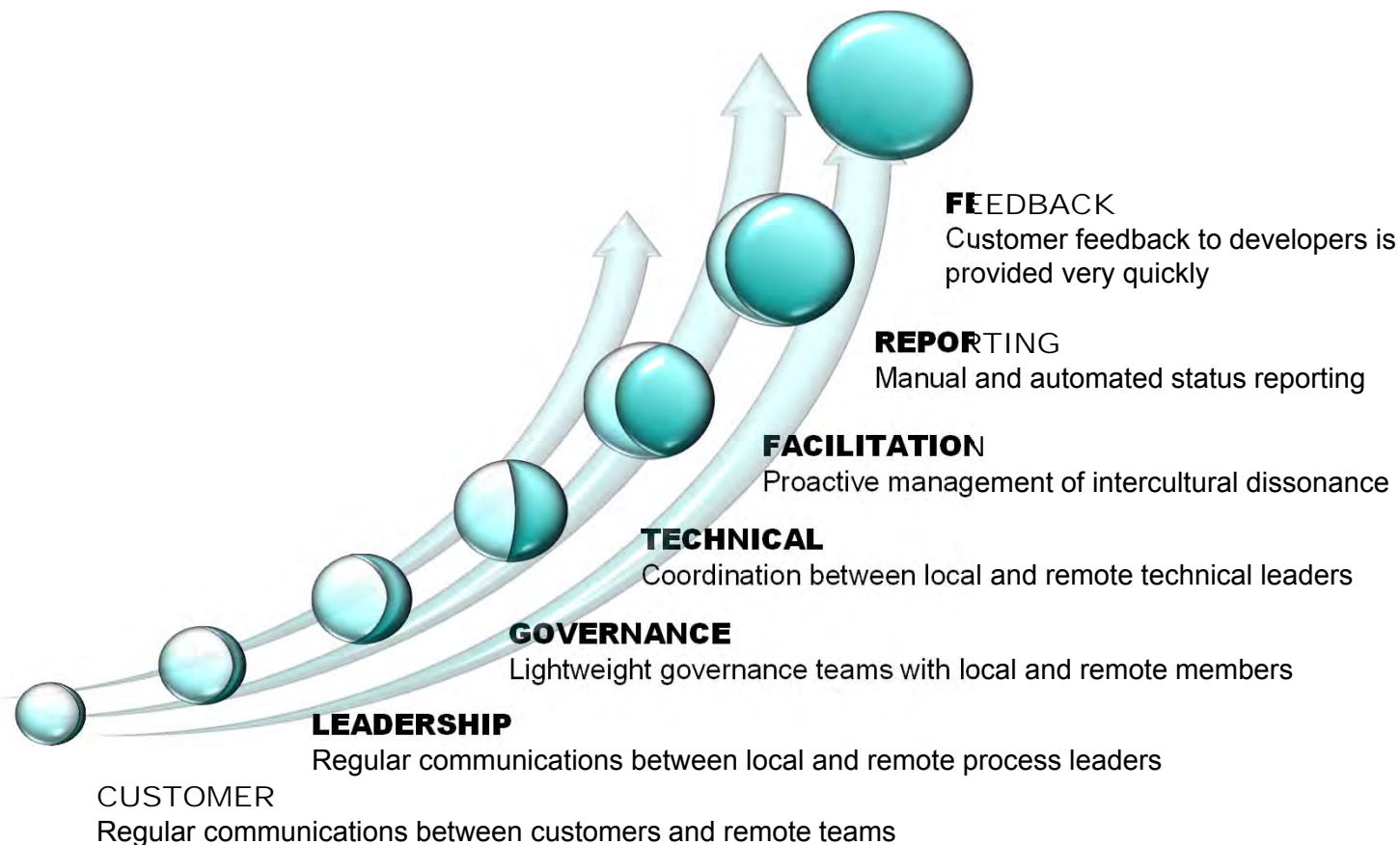
- ❑ Frequent communication is a key to project success
- ❑ Communication is better than documentation alone
- ❑ A critical key is to encourage frequent interactions



Light Coordination



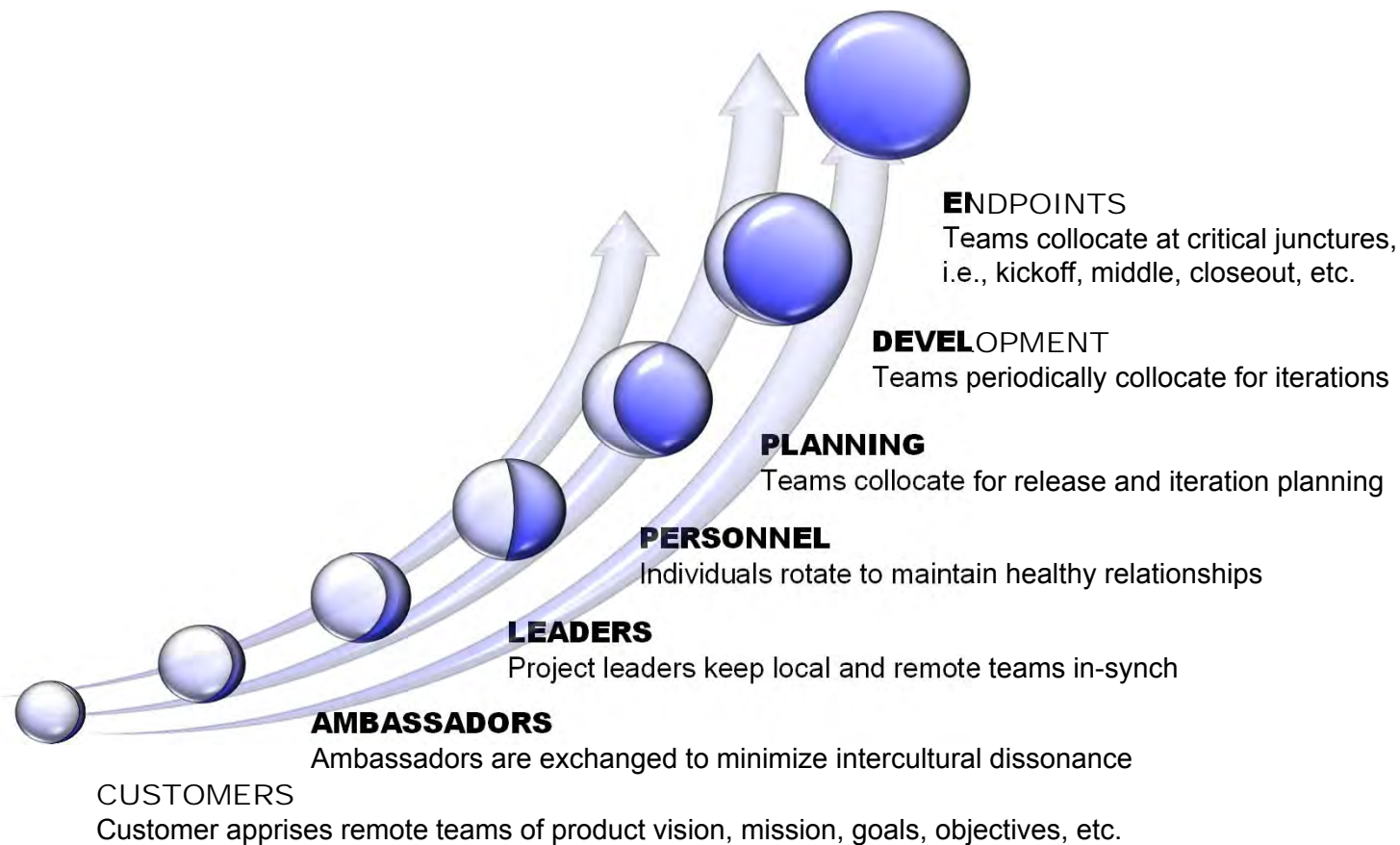
- ❑ The work of two or more teams requires facilitation
- ❑ Local/remote team leaders must communicate often
- ❑ All team leaders can then pass on critical information



Periodic Rotations



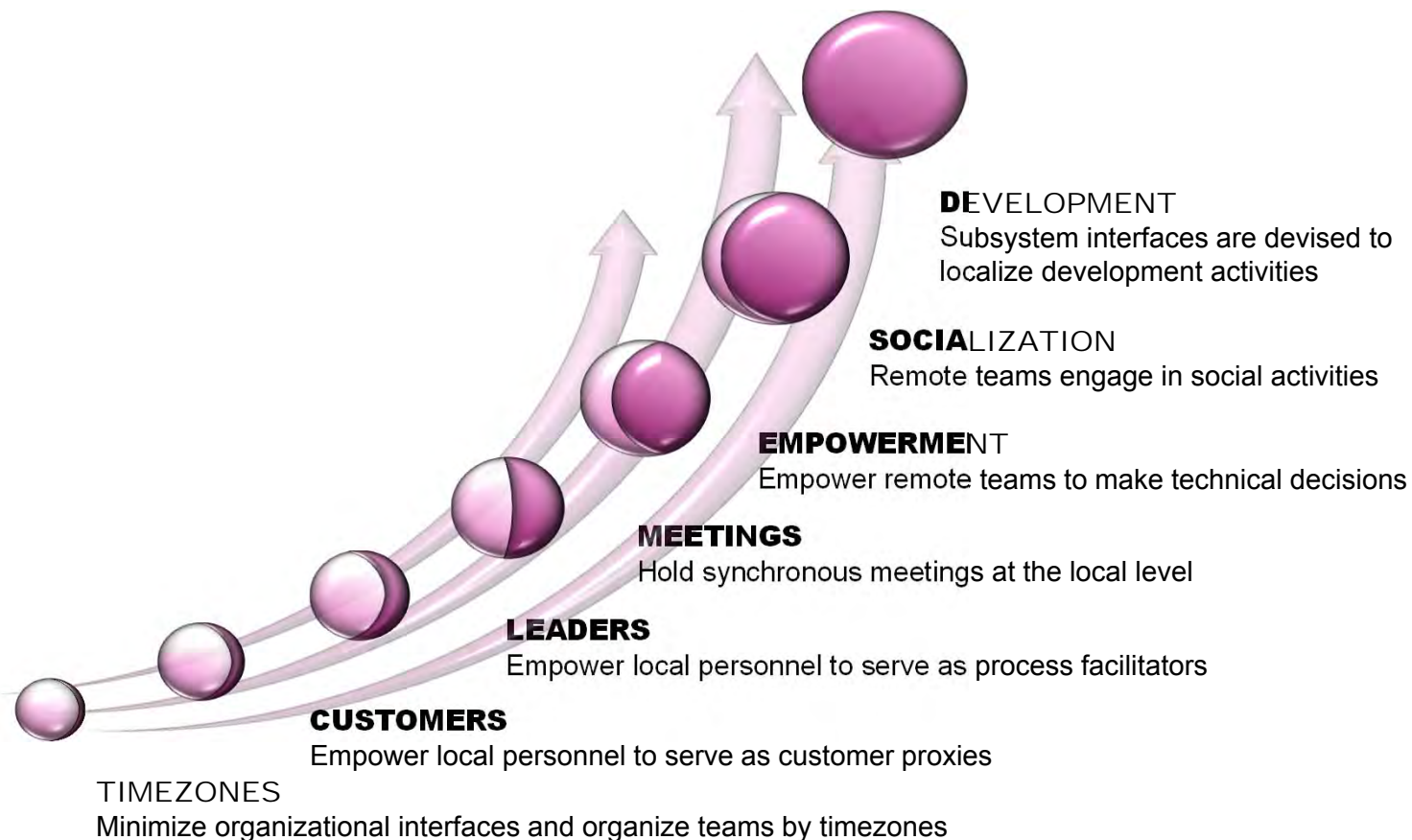
- ❑ Periodic F2F interaction is a CSF for virtual teams
- ❑ Teams should meet at critical junctures, i.e., kickoff
- ❑ Rotating customers and leaders helps establish trust



Regional Localization



- ❑ Minimizing interfaces between timezones is oft cited
- ❑ Products should be structured to localize activities
- ❑ It's easier to communicate with nearshore teams



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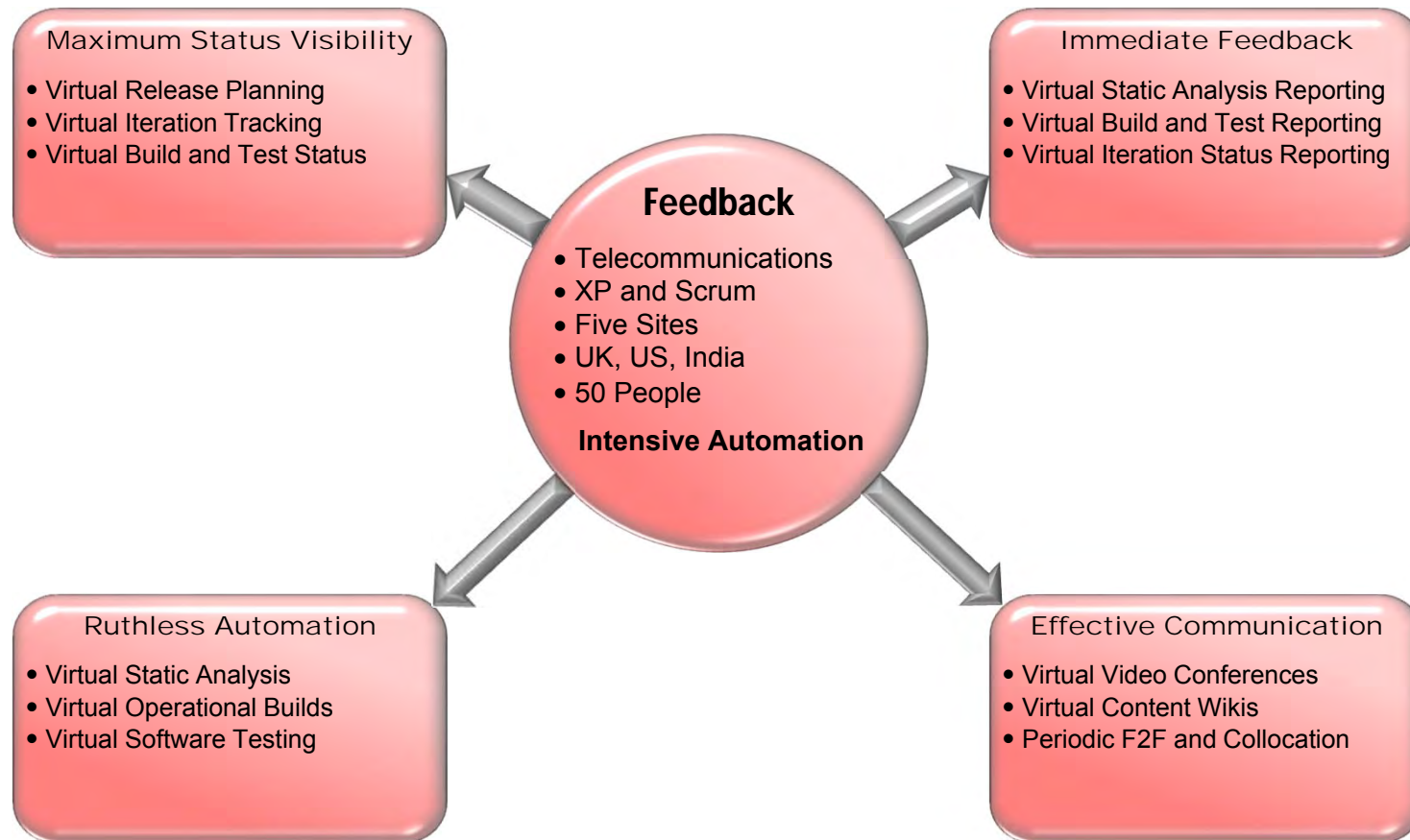
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British Telecom



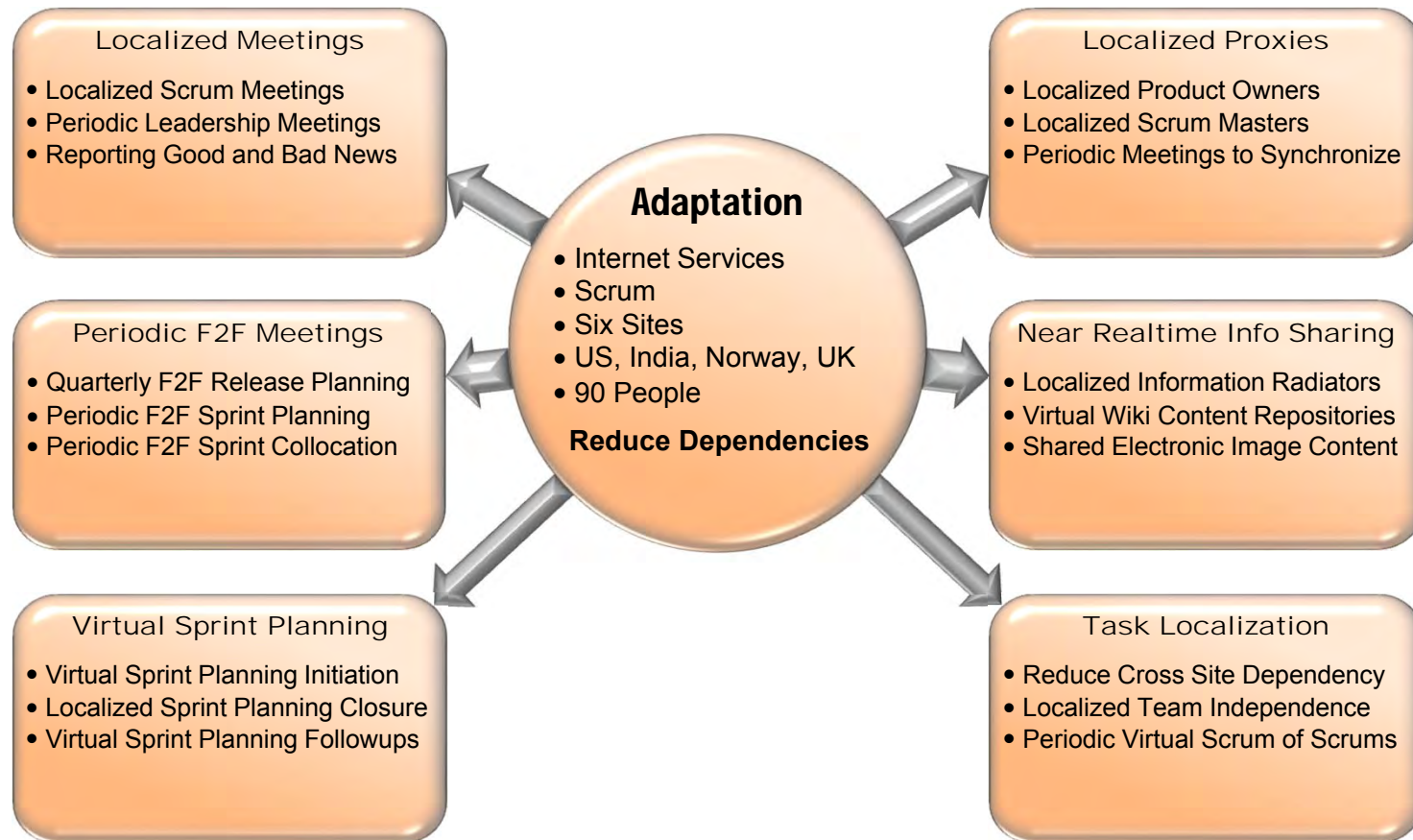
- ❑ Middleware products for phone call processing
- ❑ Goal was to obtain fast feedback with virtual teams
- ❑ Satisfied using intensive automation for fast feedback



Yahoo!



- ❑ Development of commercial Internet services
- ❑ Goal was to adapt agile methods for virtual teams
- ❑ Satisfied by minimizing use of synchronous meetings



ThoughtWorks



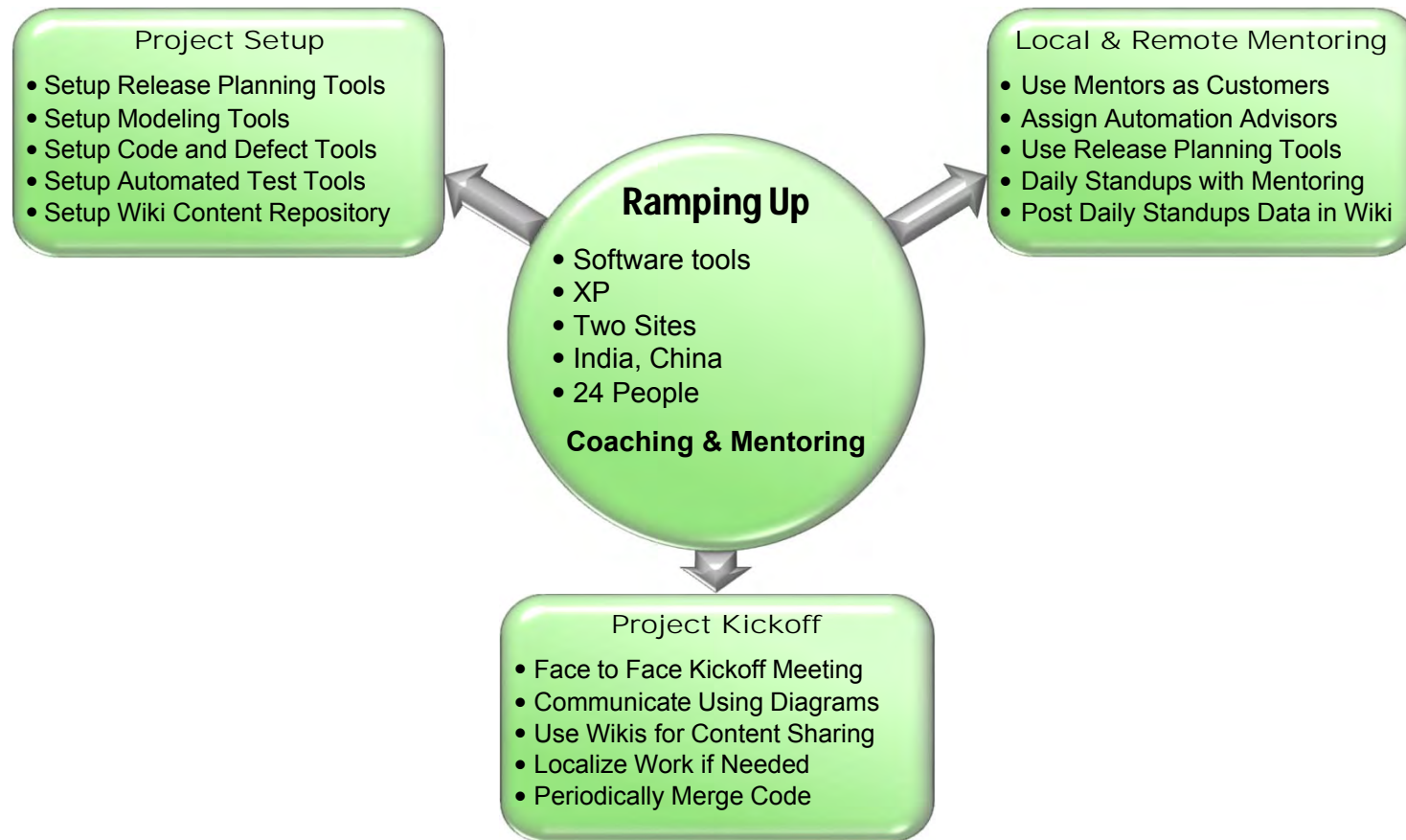
- ❑ Development of web applications for global clients
- ❑ Goal was to maintain high levels of communications
- ❑ Satisfied with F2F visits and detailed status reporting



Wipro Technologies



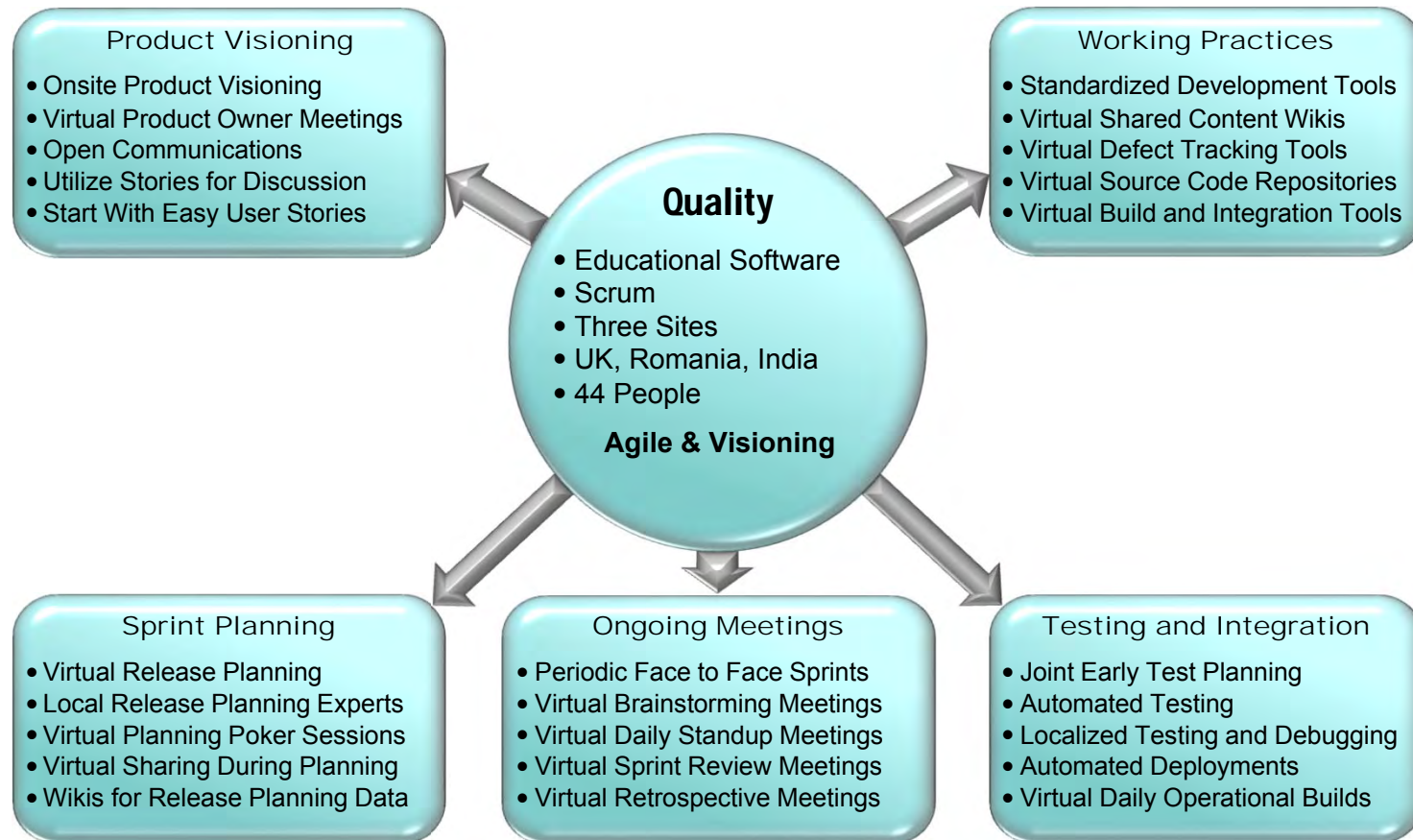
- ❑ Development of software engineering products
- ❑ Goal was to be productive across different cultures
- ❑ Satisfied by use of intensive coaching and mentoring



CampusSoft



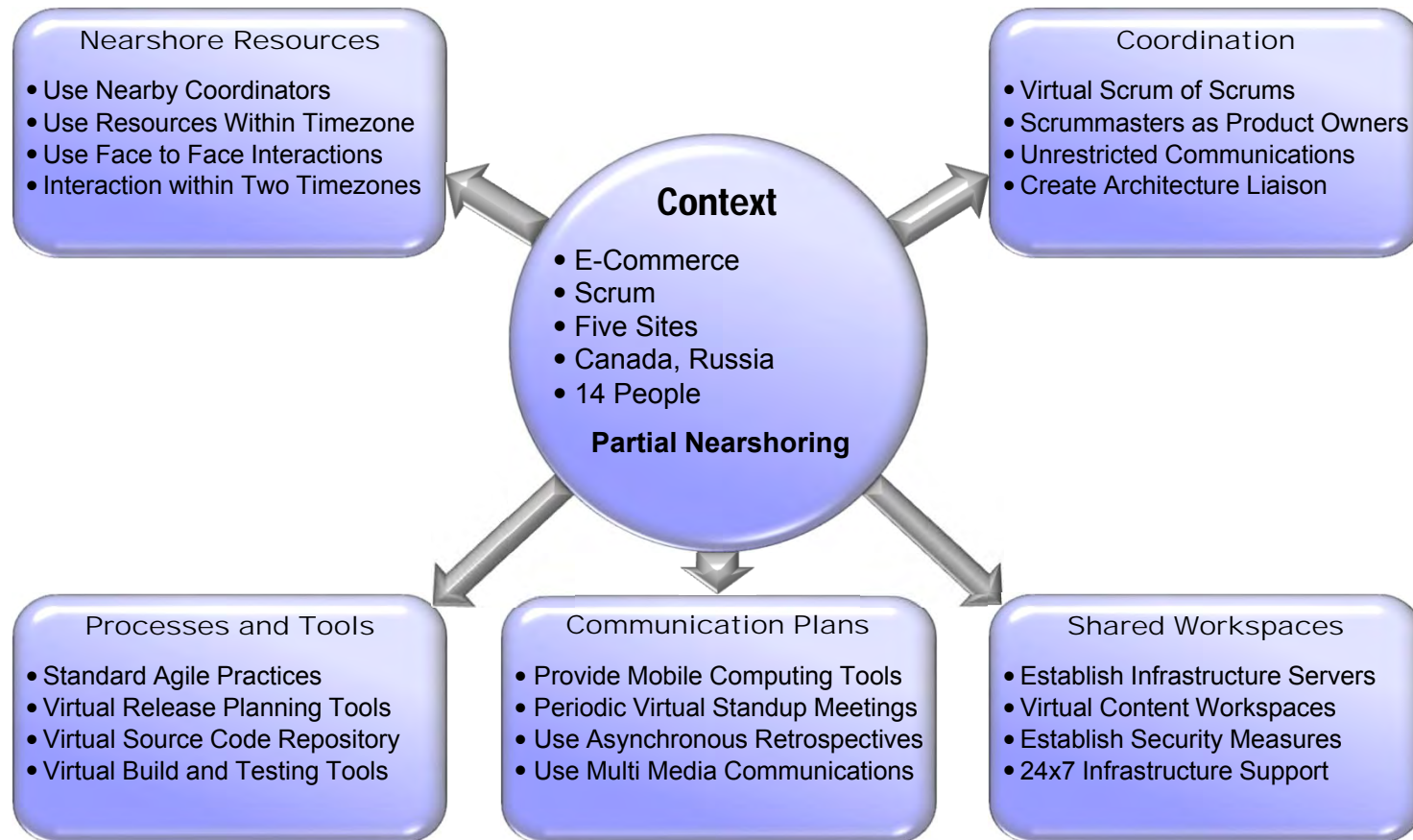
- ❑ Development of software systems for academia
- ❑ Goal was to improve quality results of global teams
- ❑ Achieved by using agile methods and onsite visioning



Elastic Path/Luxoft



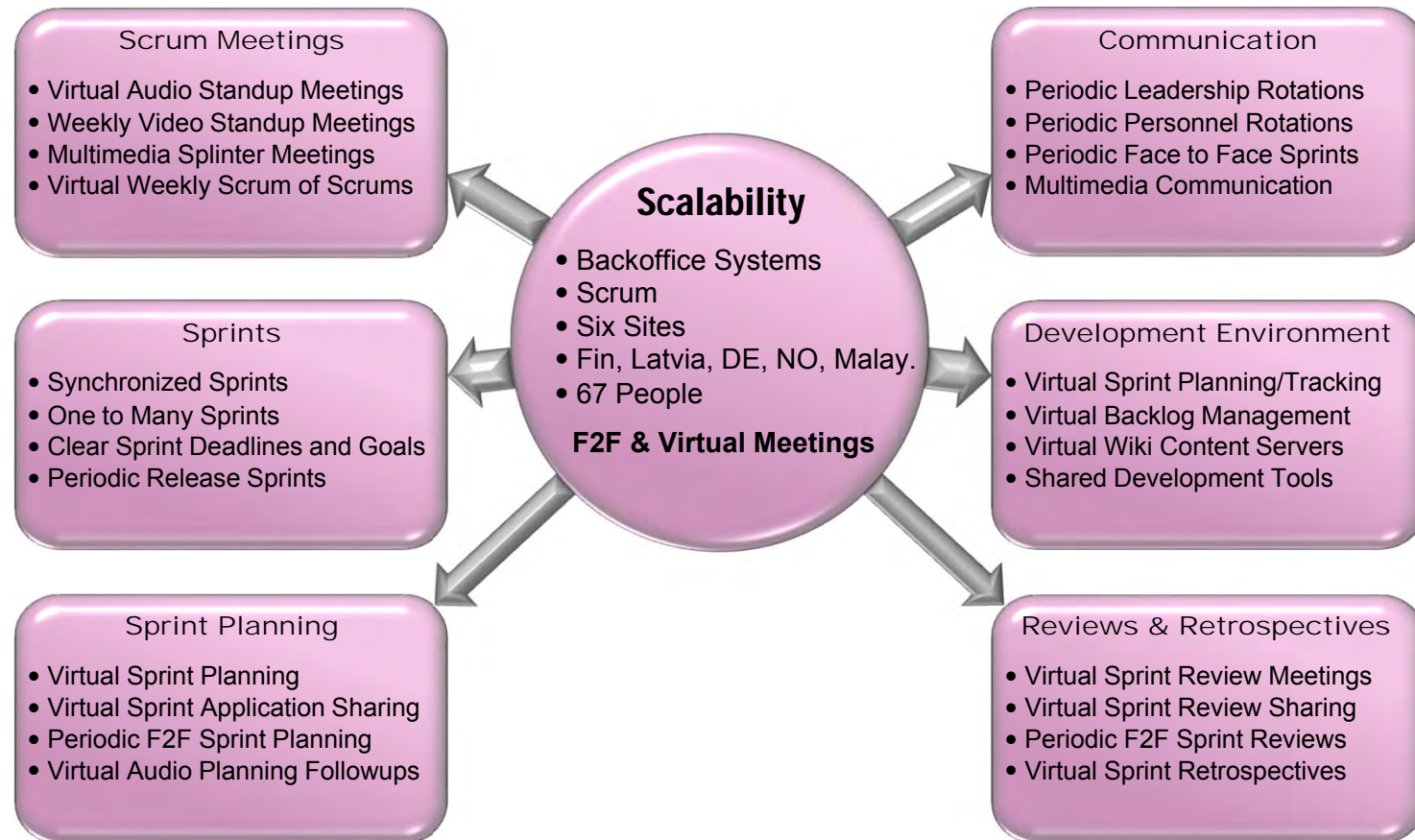
- ❑ Development of electronic commerce websites
- ❑ Goal was to maintain context with distributed team
- ❑ Satisfied with coordination in overlapping time zones



Scandinavia



- ❑ Development of internal & external web applications
- ❑ Goal was to determine if agile practices are scalable
- ❑ Satisfied with routine face-to-face & virtual meetings



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Offshore Outsourcing Metrics



- ❑ Vashistha has complete guide to offshore outsourcing
- ❑ Strategic framework for evaluating offshore locations
- ❑ Offers metrics and data to support decision making

Factors	Subfactors	India	Phil	China	Canada	Lat Am	Ireland	Czech	Poland	Hungary	Russia
Exogenous Factors that define the characteristics of the country beyond influence of organization	Geopolitical Environment	●	◐	◐	●	◐	●	●	●	●	◐
	Government Support	●	◐	○	●	●	●	●	●	●	○
	Educational System	●	◐	●	●	◐	●	●	●	●	●
	Infrastructure	◐	●	◐	●	●	●	●	●	●	◐
Catalyst Factors that drive offshore service delivery in a country	Cost Advantage	●	●	●	◐	●	◐	◐	◐	◐	●
	Language	◐	●	○	●	◐	●	◐	◐	◐	◐
	Culture	◐	◐	○	●	●	●	●	●	●	◐
	Timezone	○	○	○	●	●	◐	◐	◐	◐	○
Business Factors related to direct advantages, supplier skills, and business issues	Labor Pool	●	◐	◐	●	◐	●	○	◐	◐	●
	Competency	◐	◐	◐	●	◐	●	◐	◐	◐	◐
	Quality	◐	◐	◐	●	◐	●	◐	◐	◐	◐
	Attrition	○	◐	○	●	◐	●	◐	◐	◐	●

Costs and Benefits



- ❑ Unfacilitated virtual teams are less effective than F2F
- ❑ Offshoring saves about 25% due to lower labor costs
- ❑ Offshore savings vary based on leadership methods

Variable	F2F	Virtual
Team score	82%	78%
Interactions	24.9	17.6
Task effort	5.8 hrs	7.1 hrs
Trust	84%	72%
Cohesion	79%	66%
Outcome sat	86%	78%
Process sat	86%	76%
Emergent leader	60%	75%
Free riders	2%	9%
Deserters	0%	2%
	83%	74%

Variable	%	Cost	Low	Med	High
Wage rate	46%	\$17.5m	\$2.2m	\$4.8m	\$8.7m
Comm system	20%	\$7.6m	\$1.0m	\$2.1m	\$3.8m
Infrastructure	7%	\$2.7m	\$0.3m	\$0.7m	\$1.3m
Transition and governance	4%	\$1.5m	\$0.2m	\$0.4m	\$0.8m
Resource redeployment	1%	\$0.4m	\$0.0m	\$0.1m	\$0.2m
Training and productivity	9%	\$3.4m	\$0.4m	\$0.9m	\$1.7m
Business continuity	3%	\$1.1m	\$0.1m	\$0.3m	\$0.6m
Advisory services	4%	\$1.5m	\$0.2m	\$0.4m	\$0.8m
Travel costs	3%	\$1.1m	\$0.1m	\$0.3m	\$0.6m
Currency fluctuation	3%	\$1.1m	\$0.1m	\$0.3m	\$0.6m
		\$38.0m	\$4.8m	\$10.5m	\$19.0m

Vashistha, A., & Vashistha, A (2006). *Offshore nation: Strategies for success in global outsourcing and offshoring*. New York, NY: McGraw-Hill.
 De Pillis, E., & Furumo, K. (2007). Counting the cost of virtual teams: Studying the performance, satisfaction, and group dynamics of virtual and face to face teams. *Communications of the ACM*, 50(12), 93-95.

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 **Summary of Agile Virtual Teams**

Leadership Considerations



- ❑ Agile management is delegated to the lowest level
- ❑ There remain key leadership roles & responsibilities
- ❑ Communication, coaching, & facilitation are key ones

1	Customer Communication	Facilitate selection of methods for obtaining and maintaining executive commitment, project resources, corporate communications, and customer interaction
	Product Visioning	Facilitate selection of methods for communicating product purpose, goals, objectives, mission, vision, business value, scope, performance, budget, assumptions, constraints, etc.
	Distribution Strategy	Facilitate selection of virtual team distribution strategy to satisfy project goals and objectives
2	Team Development	Facilitate selection of methods for training, coaching, mentoring, and other team building approaches
	Standards & Practices	Facilitate selection of project management and technical practices, conventions, roles, responsibilities, and performance measures
	Telecom Infrastructure	Facilitate selection of high bandwidth telecommunication products and services
	Development Tools	Facilitate selection of agile project management tools and interactive development environment
3	High Context Meetings	Facilitate selection of high context agile project management and development meetings
	Coordination Meetings	Facilitate selection of meetings and forums for regular communications between site coordinators
	F2F Communications	Facilitate selection of methods for maximizing periodic face to face interactions and collaboration
	Performance Management	Facilities selection of methods for process improvement, problem resolution, conflict management, team recognition, product performance, and customer satisfaction

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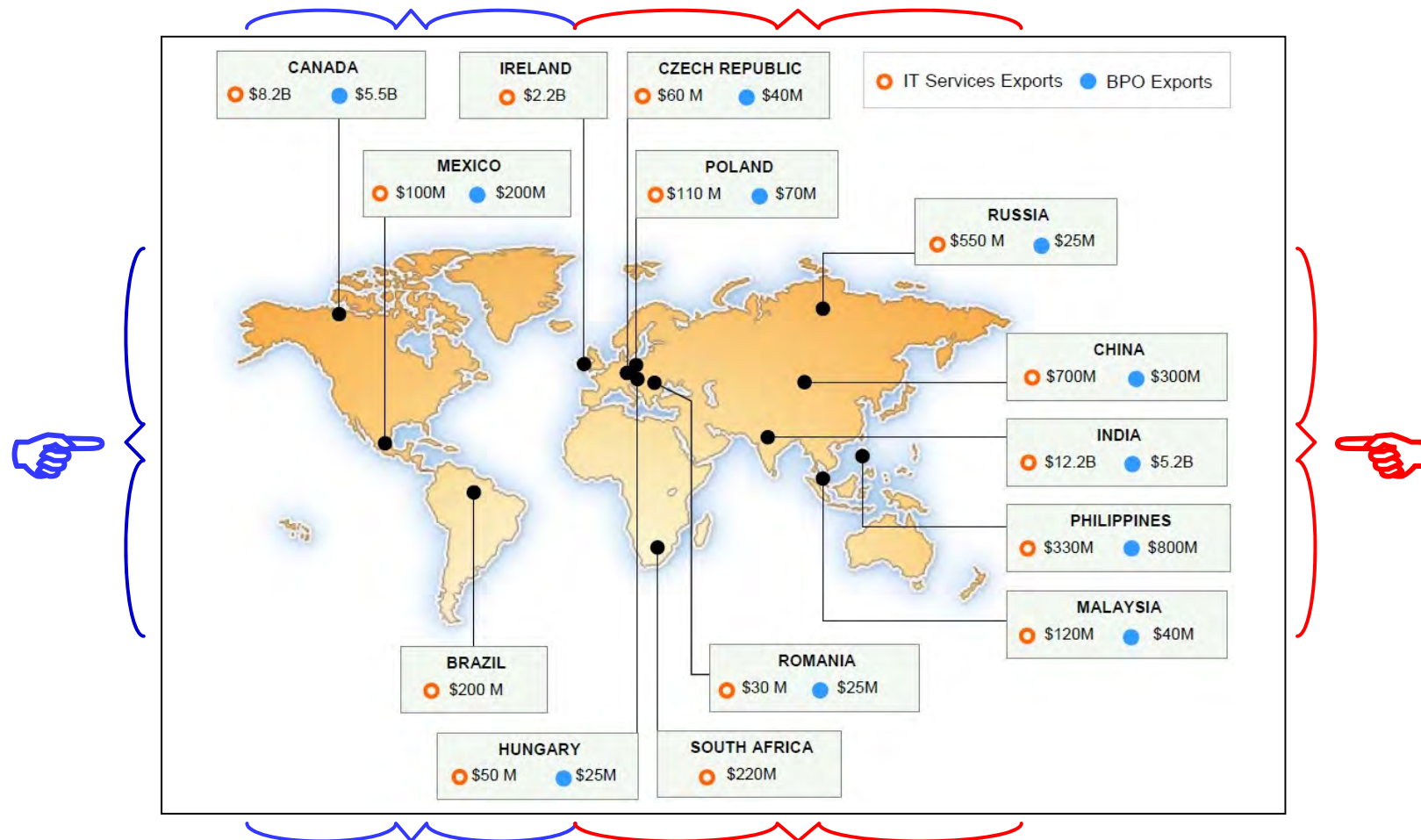
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Current Trends & Directions



- ❑ Virtual teamwork is 21st century business model
- ❑ Opens the door to offshore/nearshore outsourcing
- ❑ **Farshoring** is normal but **nearshoring** is also popular

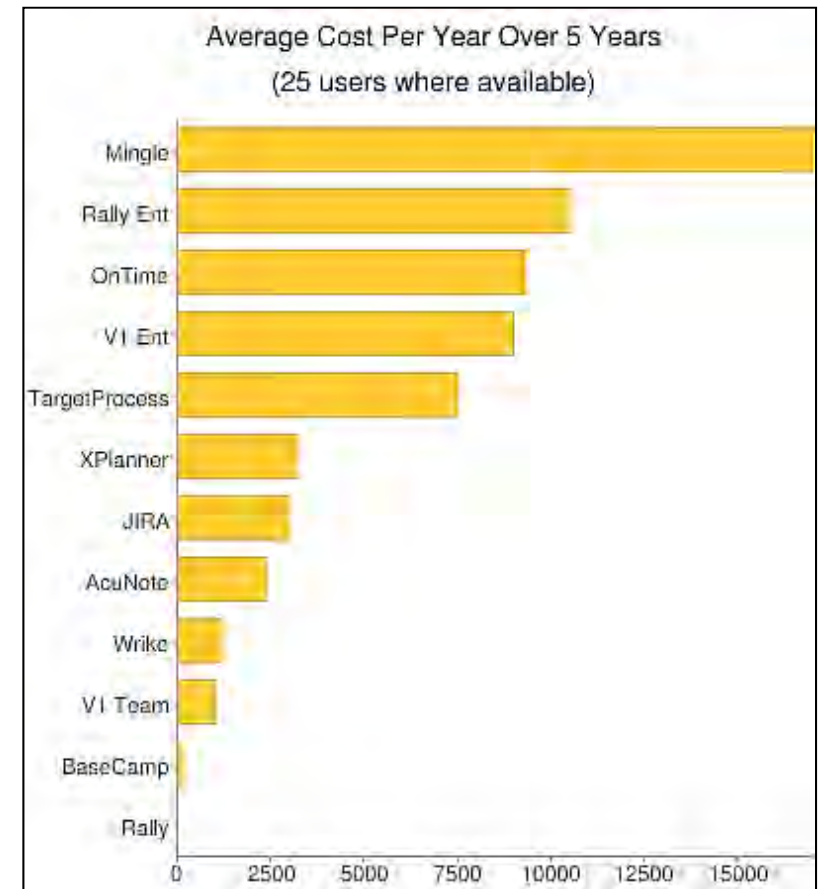
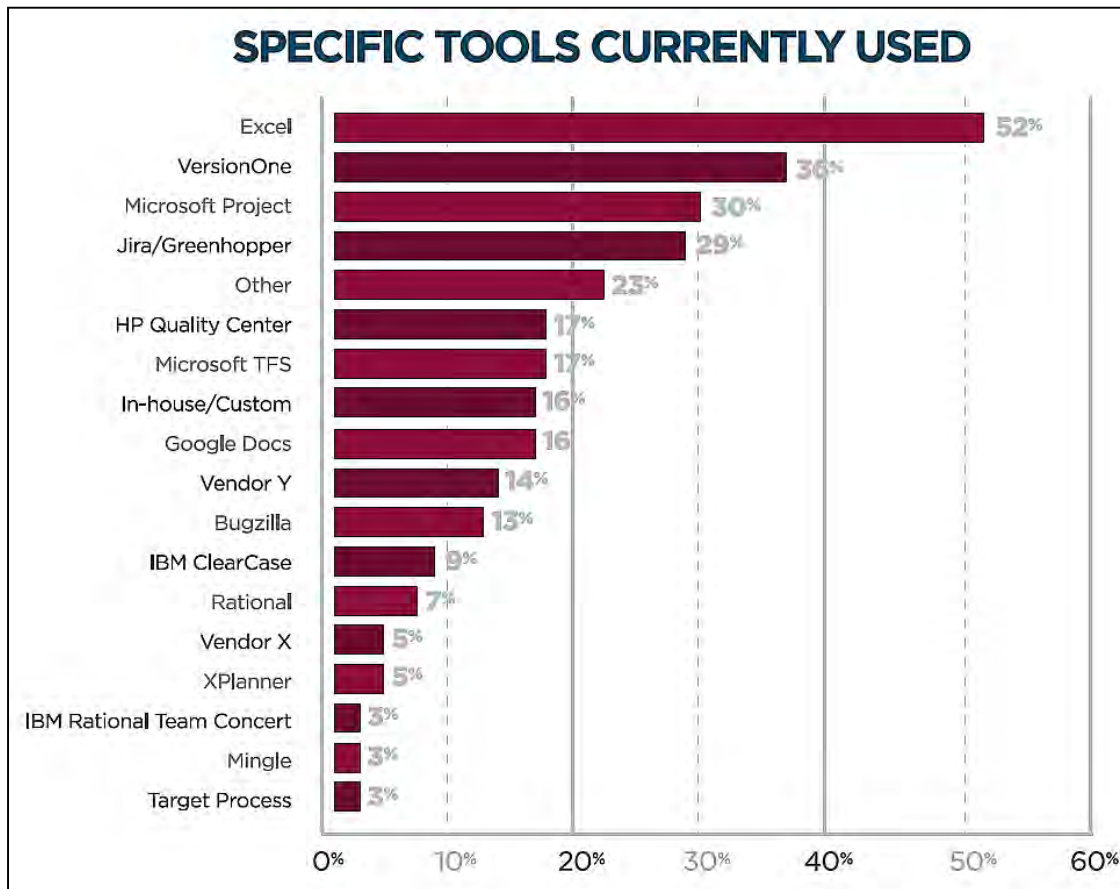


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Agile Project Mgt. Tools



- ❑ There are literally dozens, if not 100s of APM tools
- ❑ There are dozens of free open source software tools
- ❑ Annual tool & price surveys are frequently conducted



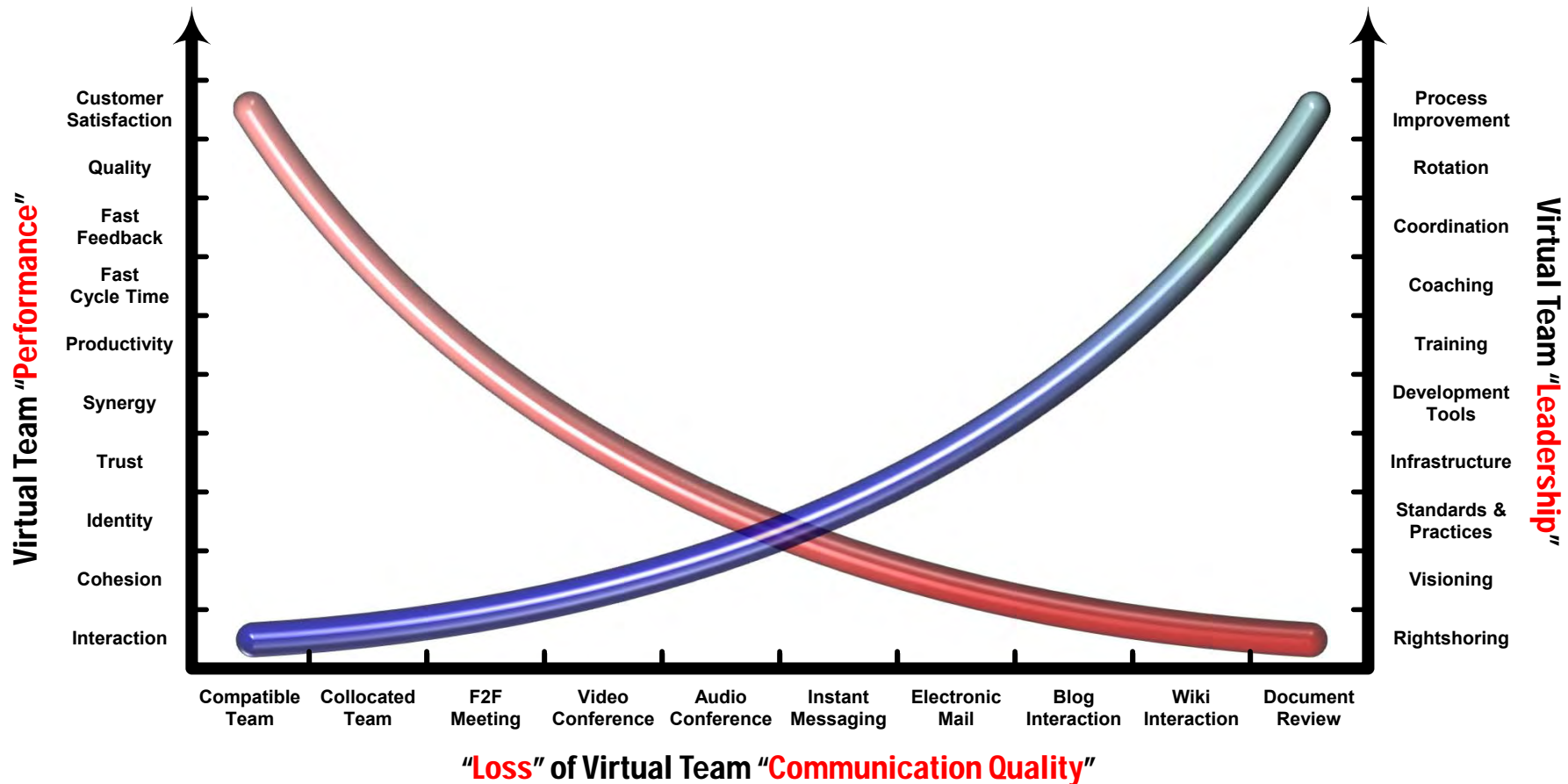
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Key Points & Takeaways



- ❑ Virtual teams communicate less undermining success
- ❑ A key is not to eliminate them in favor of F2F teams
- ❑ A better answer is to support them with leadership



Rico, D. F. (2010). The paradox of agile project management and virtual teams. *Gantthead*.

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Key Agile Scaling Pointers



- ❑ One must think and act small to accomplish big things
- ❑ Slow down to speed up, speed up 'til wheels come off
- ❑ Scaling lowers productivity, quality, & business value

- **EMPOWER WORKFORCE** - Allow workers to help establish enterprise business goals and objectives.
- **ALIGN BUSINESS VALUE** - Align and focus agile teams on delivering business value to the enterprise.
- **PERFORM VISIONING** - Frequently communicate portfolio, project, and team vision on continuous basis.
- **REDUCE SIZE** - Reduce sizes of agile portfolios, acquisitions, products, programs, projects, and teams.
- **ACT SMALL** - Get large agile teams to act, behave, collaborate, communicate, and perform like small ones.
- **BE SMALL** - Get small projects to act, behave, and collaborate like small ones instead of trying to act larger.
- **ACT COLLOCATED** - Get virtual distributed teams to act, behave, communicate and perform like collocated ones.
- **USE SMALL ACQUISITION BATCHES** - Organize suppliers to rapidly deliver new capabilities and quickly reprioritize.
- **USE LEAN-AGILE CONTRACTS** - Use collaborative contracts to share responsibility instead of adversarial legal ones.
- **USE ENTERPRISE AUTOMATION** - Automate everything with Continuous Integration, Continuous Delivery, & DevOps.

Conclusion



- ❑ Agile methods DON'T mean deliver it now & fix it later
- ❑ Lightweight, yet disciplined approach to development
- ❑ Reduced cost, risk, & waste while improving quality

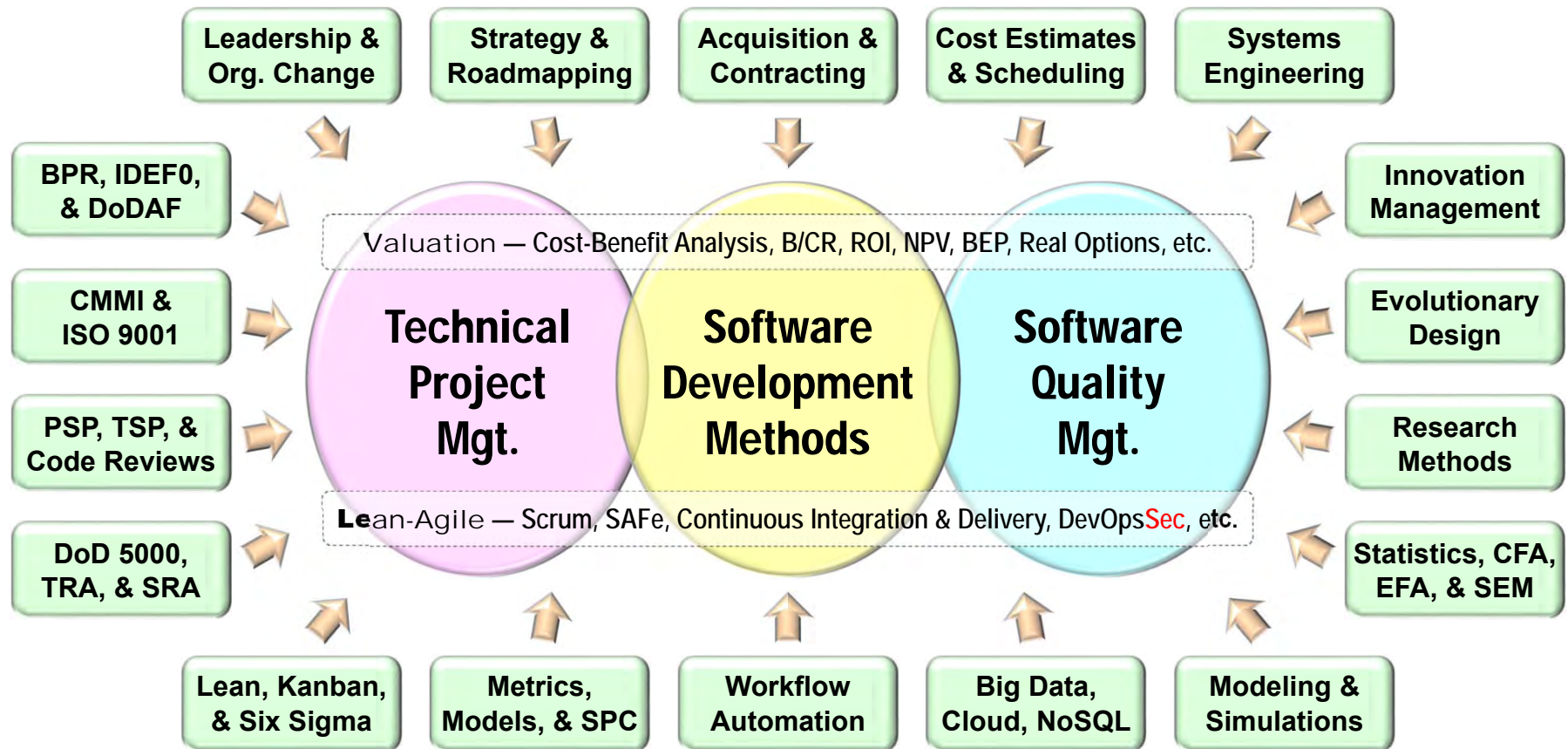
What	How	Result
Flexibility	Use lightweight, yet disciplined processes and artifacts	Low work-in-process
Customer	Involve customers early and often throughout development	Early feedback
Prioritize	Identify highest-priority, value-adding business needs	Focus resources
Descope	Descope complex programs by an order of magnitude	Simplify problem
Decompose	Divide the remaining scope into smaller batches	Manageable pieces
Iterate	Implement pieces one at a time over long periods of time	Diffuse risk
Leanness	Architect and design the system one iteration at a time	JIT waste-free design
Swarm	Implement each component in small cross-functional teams	Knowledge transfer
Collaborate	Use frequent informal communications as often as possible	Efficient data transfer
Test Early	Incrementally test each component as it is developed	Early verification
Test Often	Perform system-level regression testing every few minutes	Early validation
Adapt	Frequently identify optimal process and product solutions	Improve performance

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Dave's Professional Background



STRENGTHS – Data Mining • Gathering & Reporting Performance Data • Strategic Planning • Executive & Management Briefs • Brownbags & Webinars • White Papers • Tiger-Teams • Short-Fuse Tasking • Audits & Reviews • Etc.



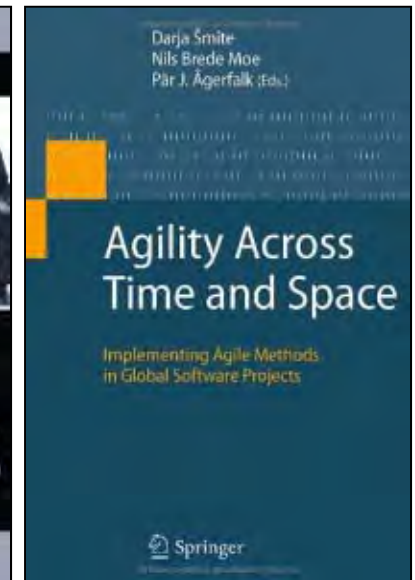
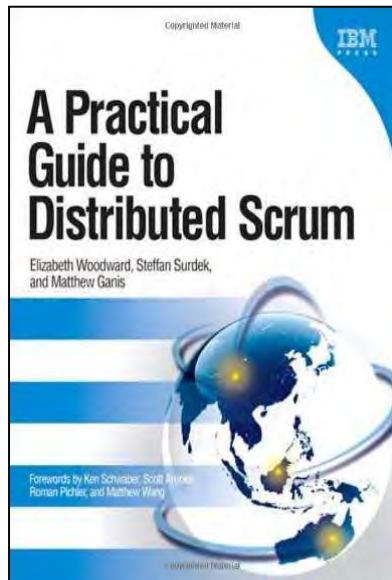
- **Data mining.** Metrics, benchmarks, & performance.
- **Simplification.** Refactoring, refinement, & streamlining.
- **Assessments.** Audits, reviews, appraisals, & risk analysis.
- **Coaching.** Diagnosing, debugging, & restarting stalled projects.
- **Business cases.** Cost, benefit, & return-on-investment (ROI) analysis.
- **Communications.** Executive summaries, white papers, & lightning talks.
- **Strategy & tactics.** Program, project, task, & activity scoping, charters, & plans.



Books—Agile Virtual Teams



- ❑ Virtual teams are the last frontier in agile methods
- ❑ Numerous books emerging on agile virtual teams
- ❑ Books by Woodward & Eckstein among the best



Woodward, E., Surdek, S., & Ganis, M. (2010). *A practical guide to distributed scrum*. Indianapolis, IN: IBM Press.

Eckstein, J. (2010). *Agile software development with distributed teams: Staying agile in a global world*. New York, NY: Dorset House.

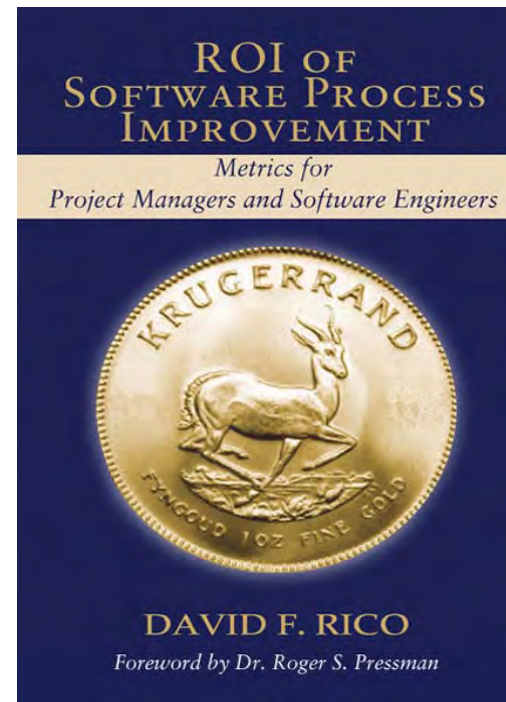
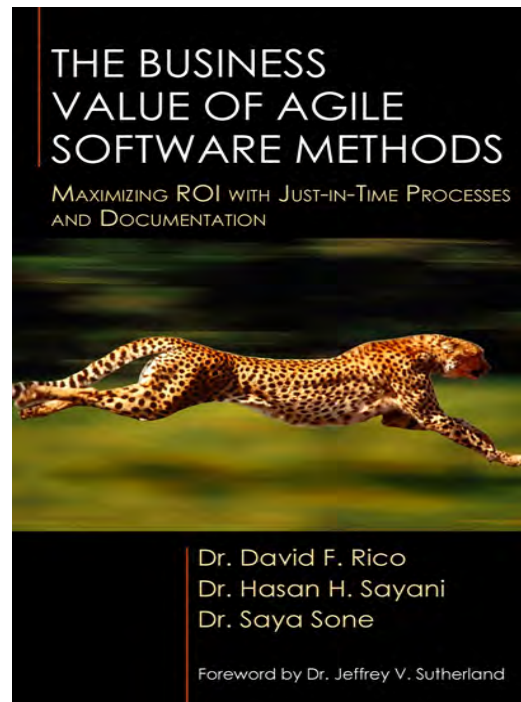
Upadrista, V. (2008). *Managing offshore development projects: An agile approach*. Oshawa, Canada: Multi-Media Publications.

Ambler, S., & Aguanno, K. (2010). *Adapting agile for use with distributed teams*. Oshawa, Canada: Multi-Media Publications.

Mite, D., Moe, N. B., & Ågerfalk, P. J. (2010). *Agility across time and space: Implementing agile methods in global software projects*. Berlin, Germany: Springer-Verlag.

Books on ROI of SW Methods

- ❑ Guides to software methods for business leaders
- ❑ Communicates business value of software methods
- ❑ Rosetta stones to unlocking ROI of software methods



- <http://davidfrico.com/agile-book.htm> (*Description*)
- <http://davidfrico.com/roi-book.htm> (*Description*)