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Questions & Answers on Agile

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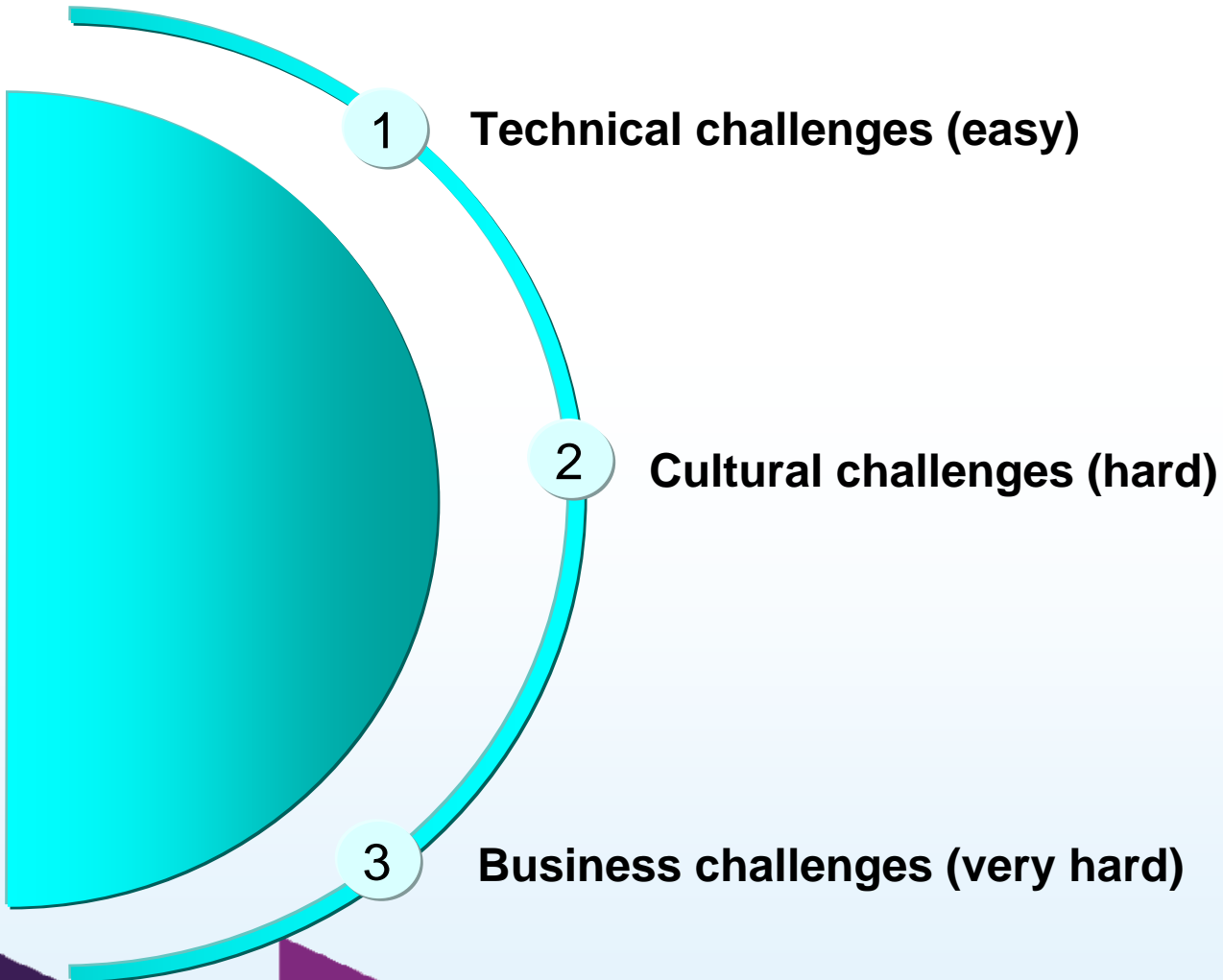
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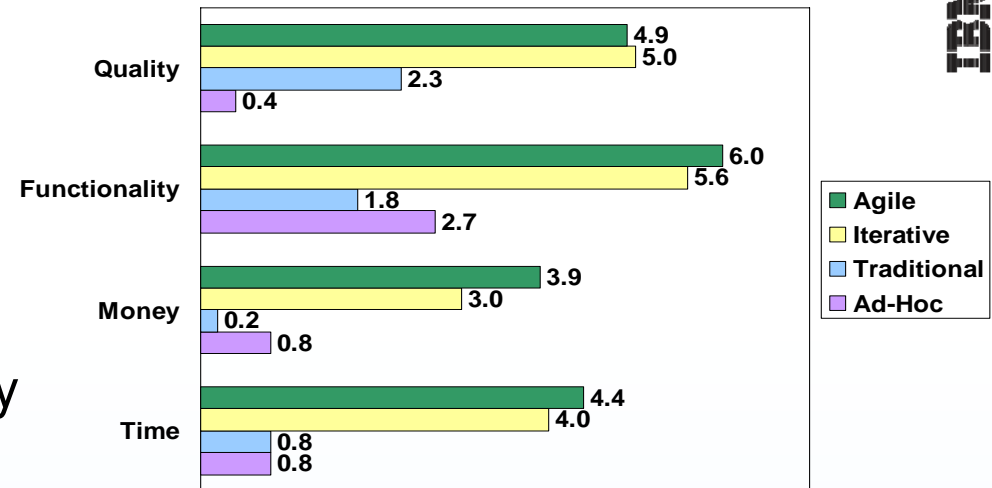
Agenda



Does agile work for all types of projects?



- Agile is based on:
 - Improved collaboration
 - Improved stakeholder visibility
 - Greater attention to quality
 - Iterative and incremental delivery
- Are you doing types of projects that wouldn't benefit from some if not all of that?



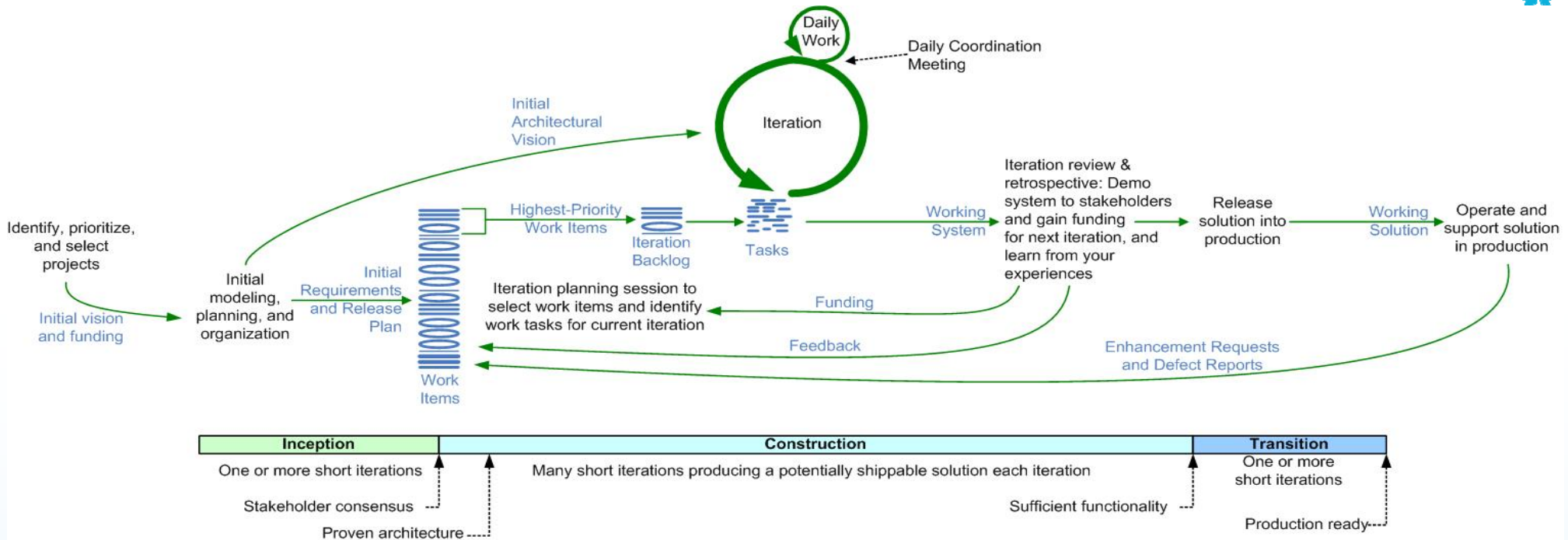
DDJ 2008 Project Success Survey

What are pros and cons in agile environment?



- Advantages
 - Increased quality
 - Improved return on investment (ROI)
 - Increased customer satisfaction
 - Improved time to delivery
- Disadvantages
 - Development team needs to work in a disciplined manner
 - Development team needs to actually produce working solutions on a regular basis
 - Customer needs to be actively involved with the team, and be accountable for their decisions
 - Contracts need to reflect the development process

What phase in SDLC is the most pay-off or important to become agile?



- The agile lifecycle is different than the traditional lifecycle
- It is important to be agile all the way through
- How to cause the most damage:
 - Remain “heavy”/traditional at the beginning of the project
 - Retain a traditional governance strategy
 - Only add agile strategies instead of replace traditional strategies with agile ones

How do you quantitatively measure agile practices?



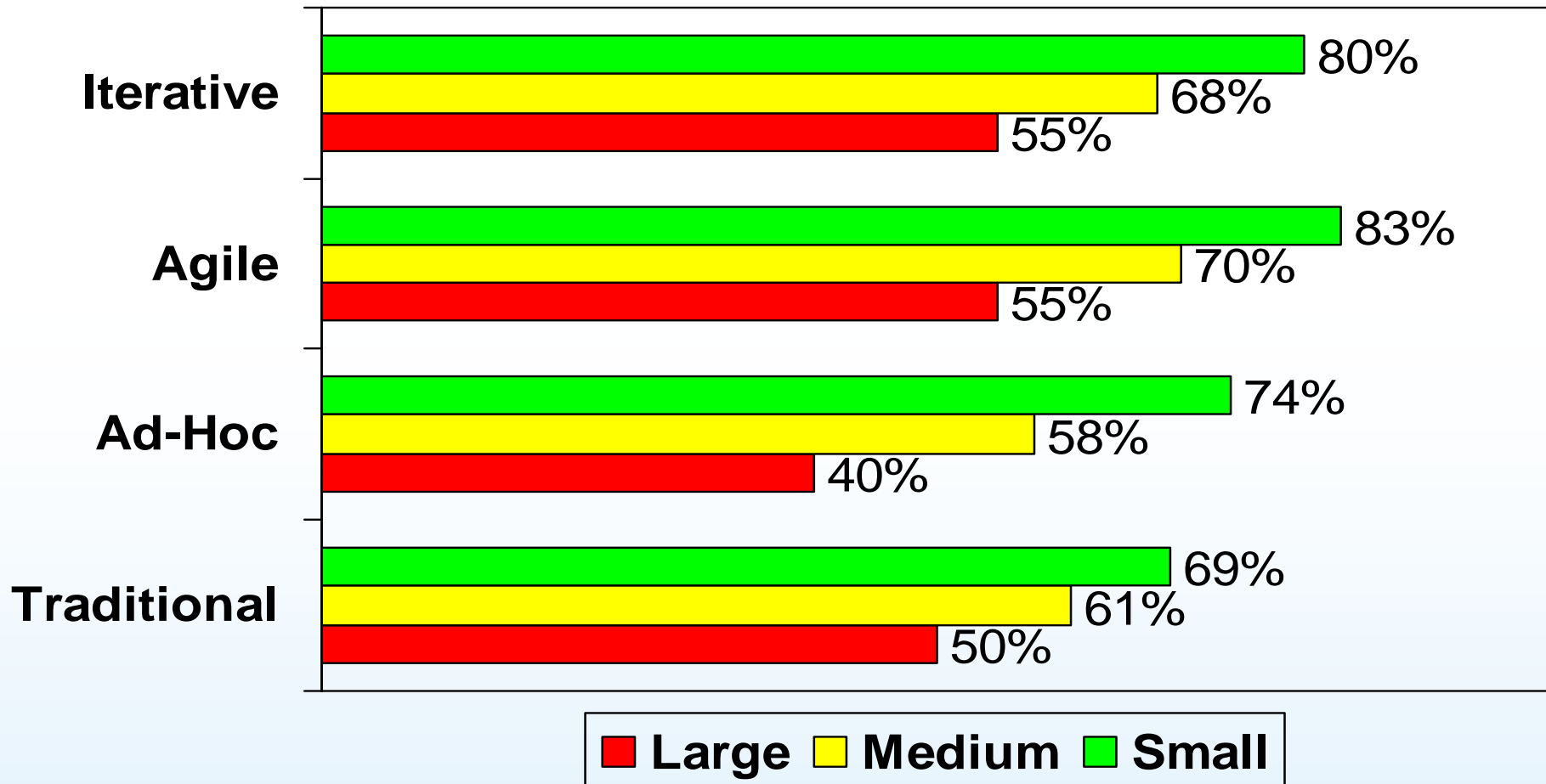
- It depends ;-)
- You need to identify what your goals are:
 - Improve quality?
 - Improve time to delivery?
 - Improve return on investment (ROI)?
 - Improve staff retention?
- Different goals have different measures
- Advice:
 - You need multiple metrics
 - Trends are usually more important than point-in-time values
 - Automated metrics, such as those produced by Jazz-based tools, reduce overhead for development teams while increasing timeliness and accuracy of metrics
 - You'll still need some manually created metrics
 - Some traditional metrics still make sense – i.e. defect trend rates
 - Some traditional metrics might make sense, but are probably cost prohibitive – i.e. function points

Are there any simulation techniques and tools to predict the benefits or performance on agile practices?

- For some agile strategies, decades of evidence exists showing that they work better
- For other agile strategies, there is growing evidence that they work better
- But, the primary determinant of success is the people and the way they work together
- The best way to predict the benefits/performance is to pilot them in your environment and see for yourself. You are doing exactly that.



How is agile working in large scale projects?



Source: DDJ State of IT Union Survey July 2010

How can we simplify the toolset?

- There is significant benefit for working with integrated and instrumented tools such as the Jazz platform
- But:
 - You need to look at the whole picture, not just point-specific issues
 - You need to consider the total cost of ownership (TCO)
 - You need to consider the total value of ownership (TVO)
- A common strategy is to adopt many point-specific tools at first to solve immediate, partial needs
 - i.e. Hudson for continuous integration (CI)
 - i.e. Redmine for project planning and coordination
- Later, adoption more sophisticated tooling such as Rational Team Concert (RTC)
 - RTC addresses the point-specific functionality and more
 - It does so in an integrated and instrumented manner
 - The implication is that you'll want to abandon the point specific tools at some point
- Pilot teams will take the brunt of this as you learn what tools work best for you
- You'll want to identify a (reasonably) common toolset before rolling out agile to a larger number of teams



As the organization is on agile@scale across the enterprise, does agile help CMMI assessment? Especially over CMMI ML4?



- Your CMMI assessors will need experience with agile development
- The focus of CMMI 4 level is on measurement and CMMI level 5 on acting on the measures
 - Agile provides significantly greater visibility into project teams
 - Jazz-based products automate metrics gathering
- Industry data:
 - The Dr. Dobb's Journal (DDJ) 2008 Process Framework Survey reported that there is no statistical difference in the success rates between CMMI and non-CMMI agile projects. The implication is that CMMI doesn't necessarily harm agile strategies
 - The DDJ November 2009 State of the IT Union survey included respondents reporting success at applying agile and CMMI together

What is the suggested approach for maintaining the robust SW platform and refactoring ?



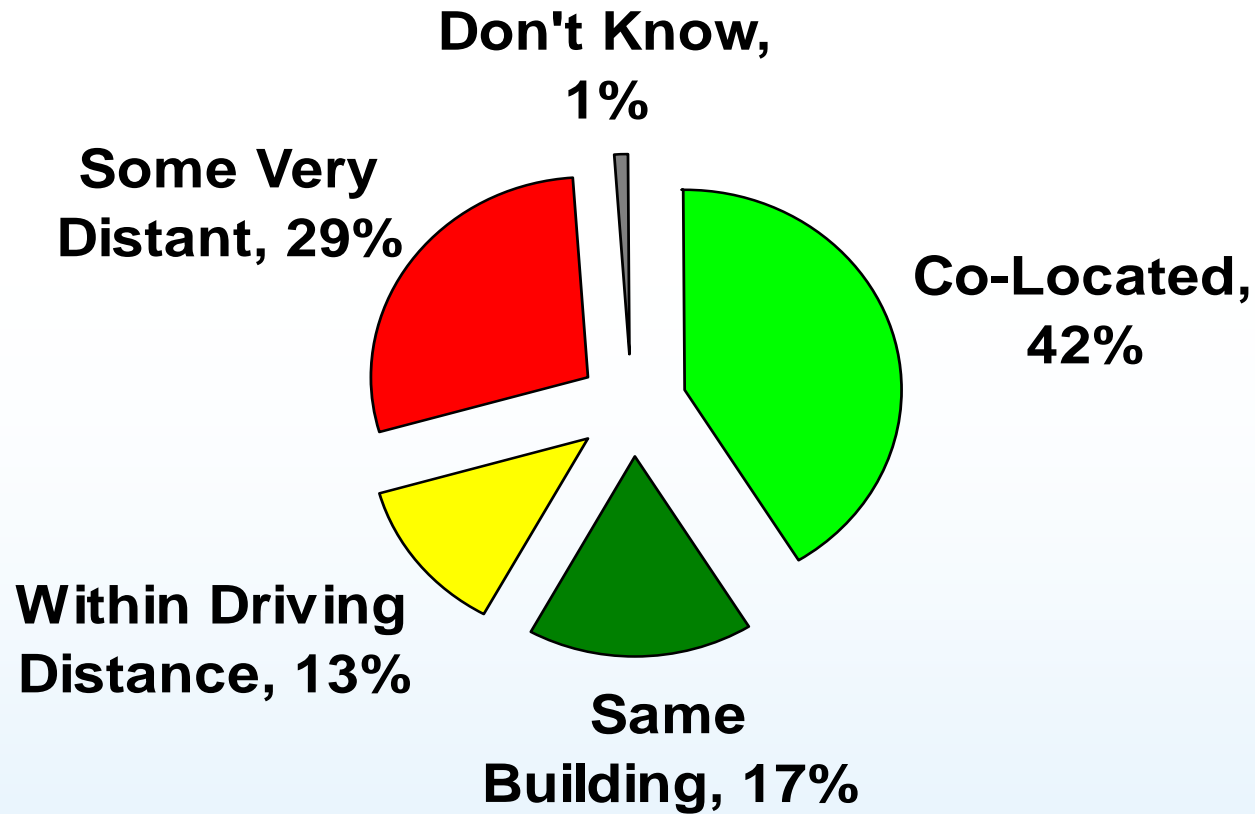
- Refactorings are simple changes to your code, database schema, or user interface which improves the quality without changing the semantics
 - You make things better, you don't add new features
 - Refactorings are very small, they're something that mature professionals do naturally
- Agilists take an evolutionary approach to architecture
 - Architecture envisioning at the beginning of a project
 - Details are worked out throughout the project
 - Collaboration, not documentation
- Disciplined agilists work closely with enterprise professionals
 - Enterprise architects to help you understand the existing infrastructure and the "to be" vision
 - Reuse engineers to leverage or develop reusable items

How to apply agile practices in system operation and maintenance environment ?

- Operations and maintenance can benefit from agile strategies:
 - Improved collaboration
 - Improved stakeholder visibility
 - Greater attention to quality
 - Iterative and incremental delivery



Our team isn't co-located, will agile still work?



Source: Ambyssoft 2009 Agile Practices Survey

What is the difference between an agile coach and a ScrumMaster / Team Lead

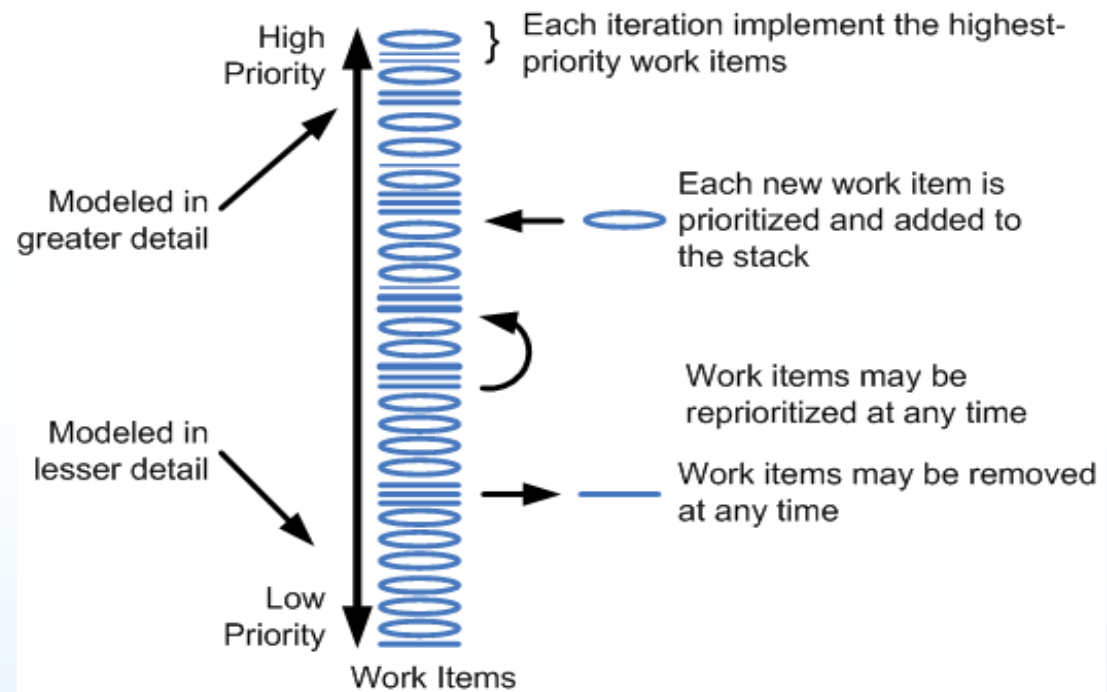


- Coaches coach the whole team (including ScrumMasters) on how to adopt agile
- ScrumMasters facilitate the agile work flow, do the planning, monitor progress, help do the work, ...

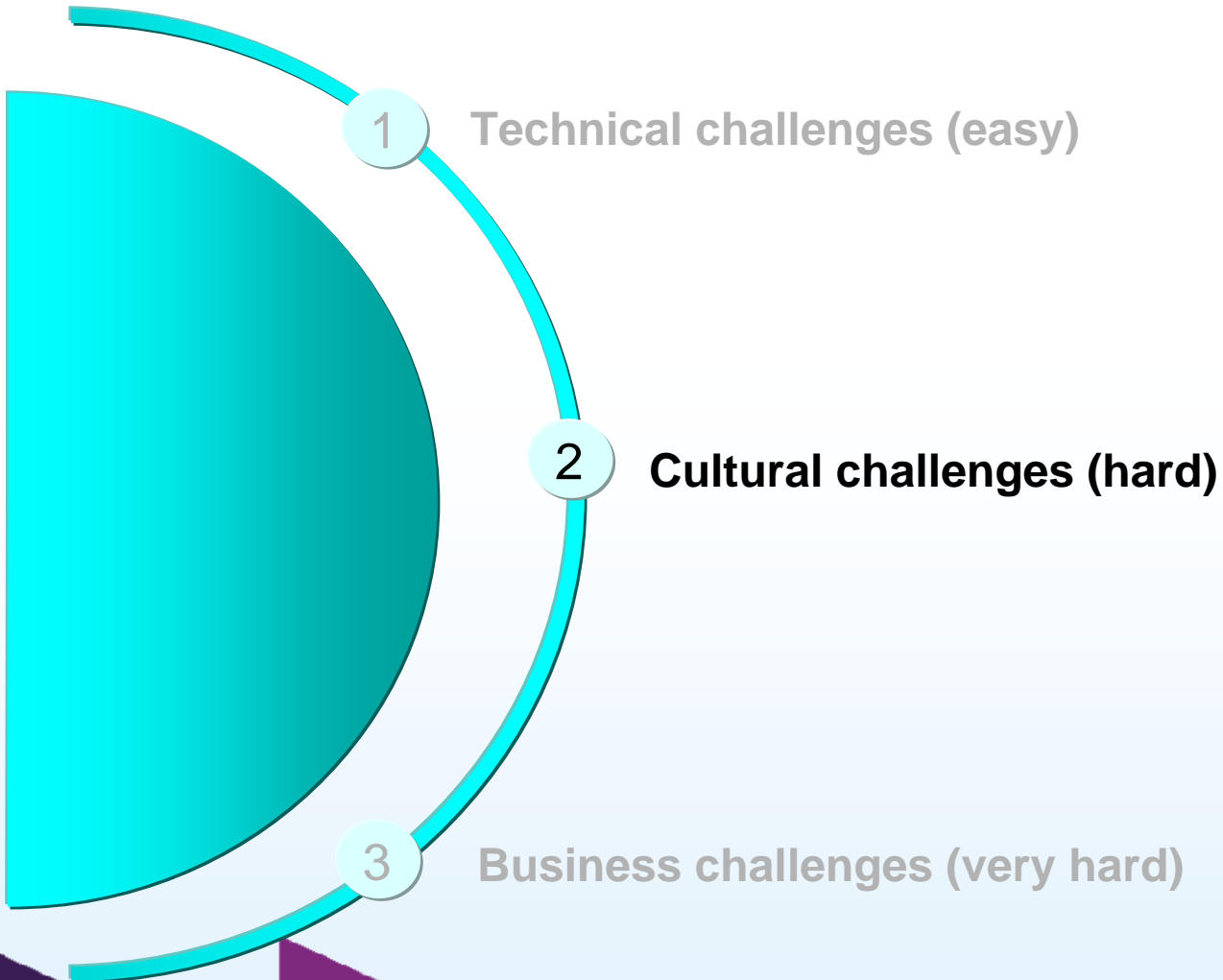
Why User stories and why not use cases ?



- You can use any type of requirement artifact that you want:
 - User stories
 - Features
 - Use cases
 - Usage scenarios
 - Defect report
 - Screen sketches
 - ...
- But:
 - The artifact needs to be small, implementable in a single sprint/iteration
 - The artifact needs to be simple, because details are gathered on a just-in-time (JIT) basis



Agenda



As an agile team members, what attitudes should people have?



- Agilists are:
 - Collaborative
 - Life-long learners
 - Self-organizing
 - Focused on delivering concrete value to the stakeholders on a regular basis
 - Focused on quality
 - Open and honest
 - Willing to share their skills
 - Willing to learn skills outside of their “specialties”

If you consider the oriental culture, it's more like vertical culture (i.e. command and control). Do you think agile would work in that environment? Do you have such an experience? If yes, how would you solve the issues ?



- Yes, there are examples of oriental organizations adopting agile
 - i.e. The IBM China Development labs
- Challenges:
 - Adopting agile requires a paradigm shift
 - Cultural issues are always the most difficult to overcome
- You will need to recognize that your existing culture:
 - Is an impediment to success
 - Can be changed
 - Needs to change
 - Is not a valid excuse
- Advice:
 - You need to educate and coach everyone involved, including senior management
 - You need to educate your customers and help them to learn how to be agile

What is best way of changing the senior management mind-set to be agile environment ?



- Senior management needs to:
 - Be educated and mentored on agile
 - Understand that they need to change too
 - Understand that agile works significantly differently than traditional
 - Recognize that agile works better
 - Support the agile adoption process, even during periods when the process isn't going so well

What is the optimal adoption rate?

- It depends!
- Every organization is different
- You start with pilot projects to:
 - Identify what challenges your organization faces
 - What your strengths are
 - What works for you
- Implications:
 - Your plans will need to evolve over time
 - Your strategy will need to evolve over time too as you learn



How do project managers fit in?

- Agile teams are self organizing
 - Agile teams plan and estimate their own work
 - Agile team members collaborate to do the work, they don't need to be told
 - Agile teams find a sustainable pace, thereby increasing their overall productivity
- Agile teams need leaders, not managers
 - The ScrumMaster/Team lead facilitates, not dictates
- Agile teams coordinate daily via stand-up meetings
 - This may take some time to get used to
 - Anyone interested in the “project status” is welcome to attend
- Many traditional project management activities are better done by the team, not the “manager”
 - This strips away a lot of the questionable bureaucracy
- The implication is that project managers need to transition to an agile role
 - Many PMs become ScrumMasters
 - Some PMs become agile team members

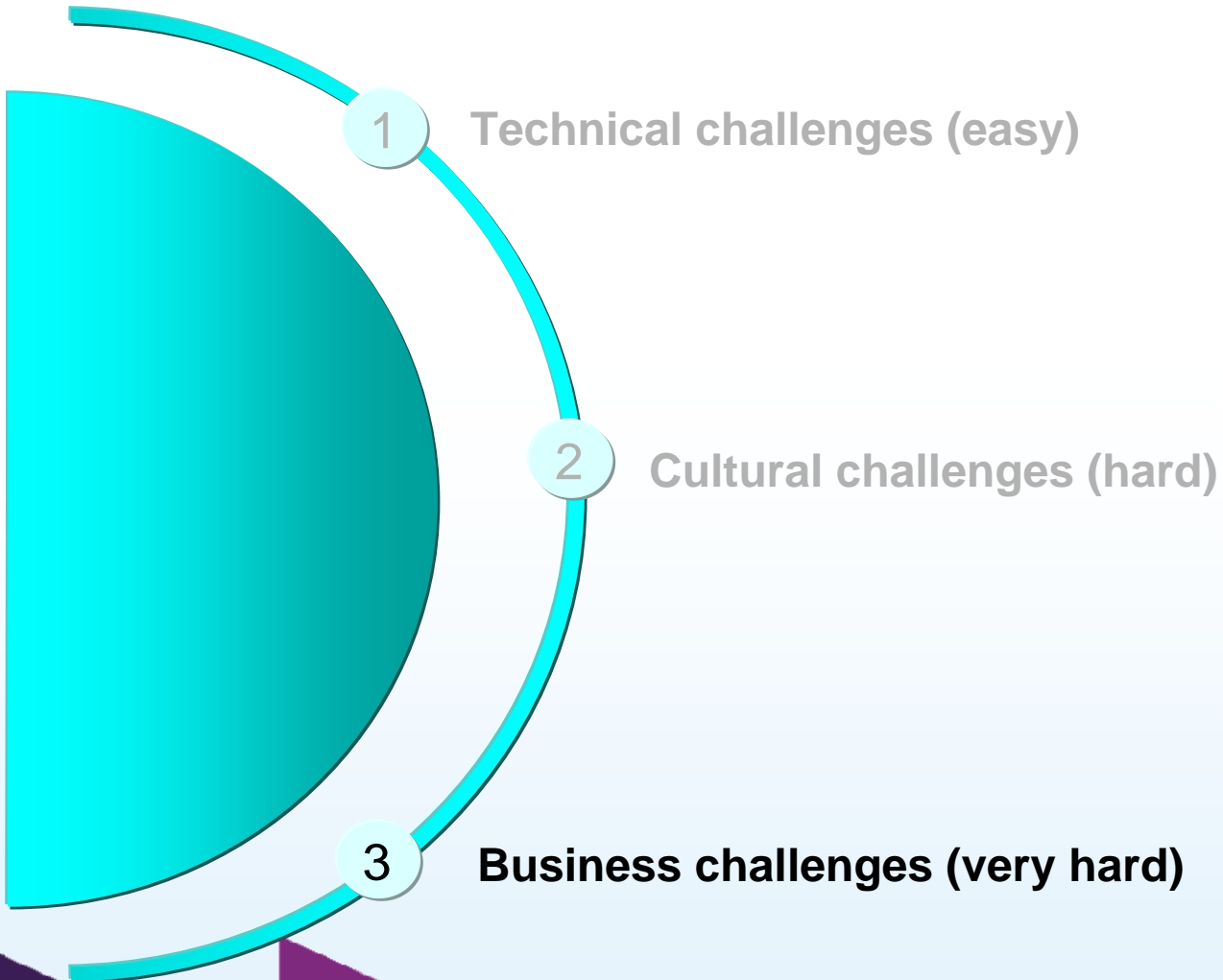


How do business analysts fit in?



- Analysis is so important, agilists do it every single day
- But, there is rarely enough analysis work required to justify the existence of someone focused just on that
- Agile teams avoid writing detailed requirements specifications due to the risk associated with doing so
- The implication is that existing business analysts need to transition to an agile role
 - Many BAs become Product Owners
 - Some BAs become agile team members
- The world has changed, BAs must change with it

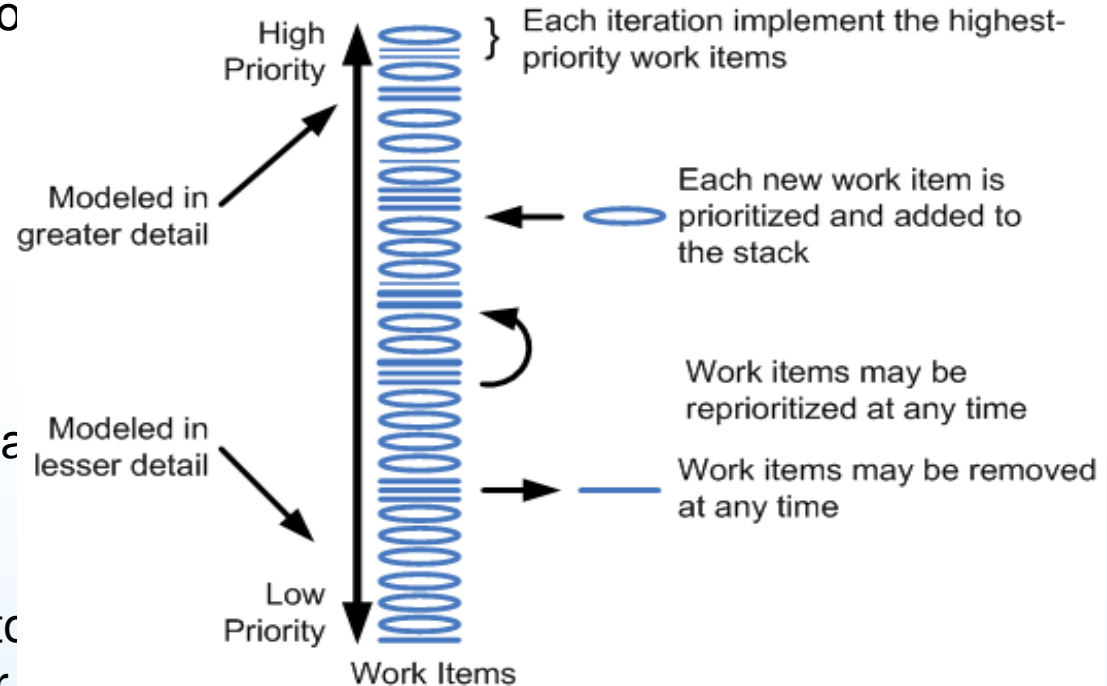
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How do agile teams deal with fixed cost/price?

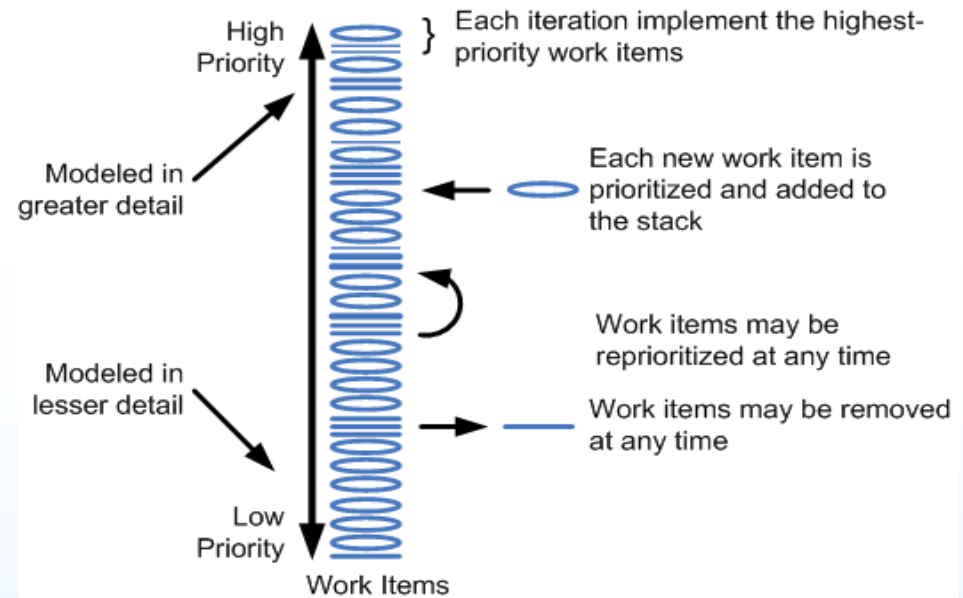


- Customers are welcome to set whatever cost they like
- Agilists work in priority order, delivering the best return on investment possible for that defined amount
- Customers must prioritize the requirements, and understand the implications of doing so
- Customers are welcome to change the requirements or prioritization of requirements at any point in time, but they will deprioritize some existing requirements
- The implication is that customers need to be actively involved and accountable for the decisions that they make



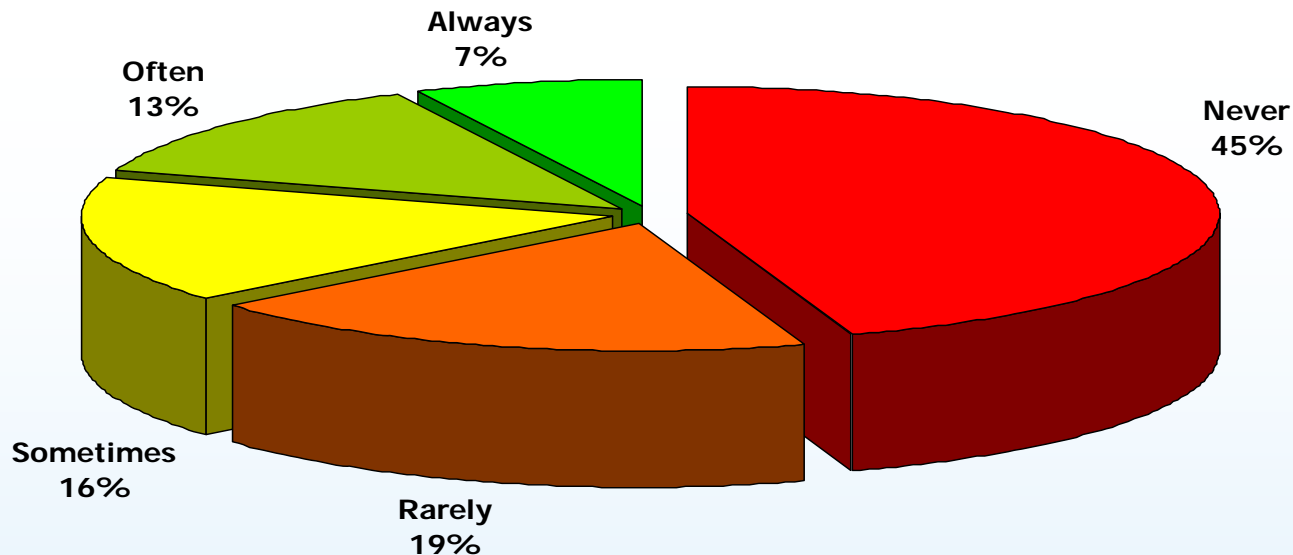
How do agile teams deal with fixed schedules?

- The customer is in complete control of the scope, schedule, and price
- They can vary, or fix, any of them
- The more factors that they fix, the greater the risk to the project
- The more factors that they fix, the more “best practices” developers will apply to push the risk onto the customer
- Effective development project teams work with customers in a collaborative partnership
- Dysfunctional development project teams work with customers on a strictly specified contractual approach
 - This is bad for both the customer and the development team



How do agile teams deal with fixed scope?

- Fixed scope projects are a sign of significant dysfunction
- Changing requirements are a competitive advantage, not something to be avoided
- Advice:
 - Educate your customers on the problem with this approach



Source: Chaos Report v3, Standish Group,
www.agilemodeling.com/essays/examiningBRUF.html

Detailed requirements specs increase project risk

Traditional “change mgmt” approaches are little more than “change prevention” strategies

Stakeholders want software which fulfills their needs, not software that fulfills a spec

The real goal is to understand and then implement requirements, not document them



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