

# The Perils of 'Agile, But'



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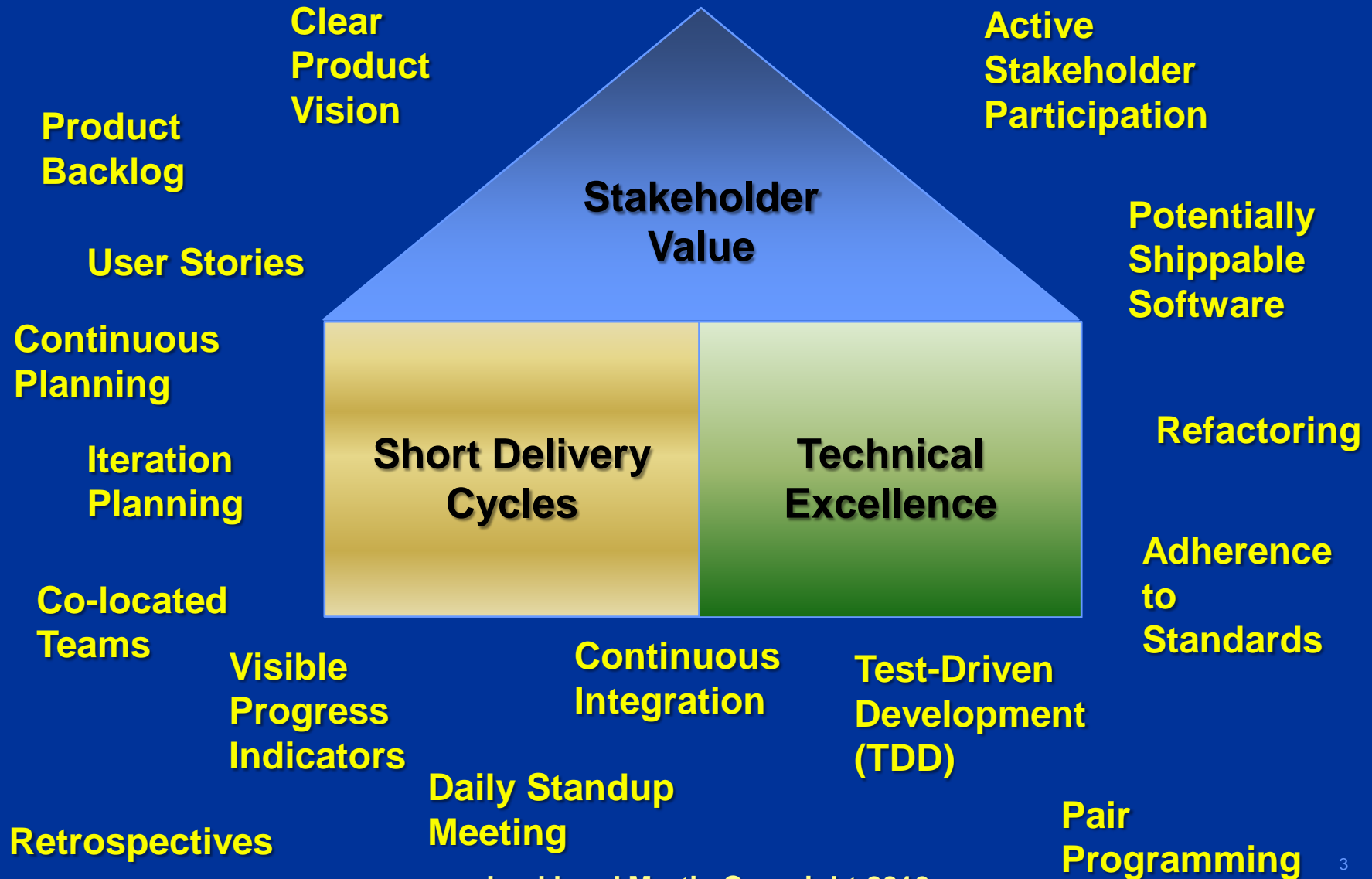
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# Topics

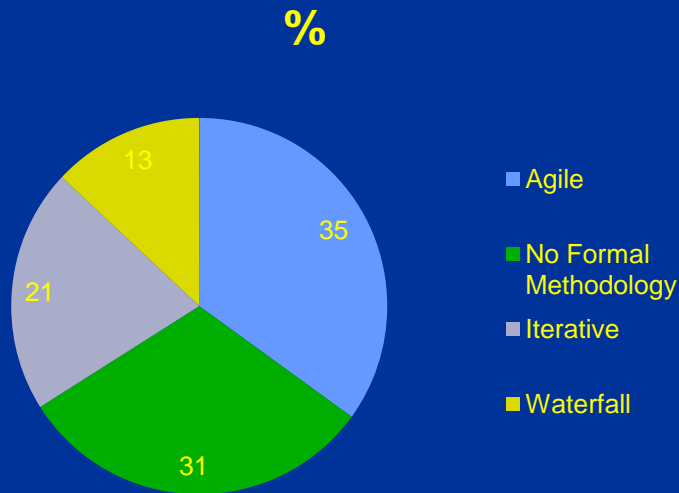


- **Foundations of Agile**
- **Some Statistics**
- **Some 'Agile, but' examples**
- **Recommendations**

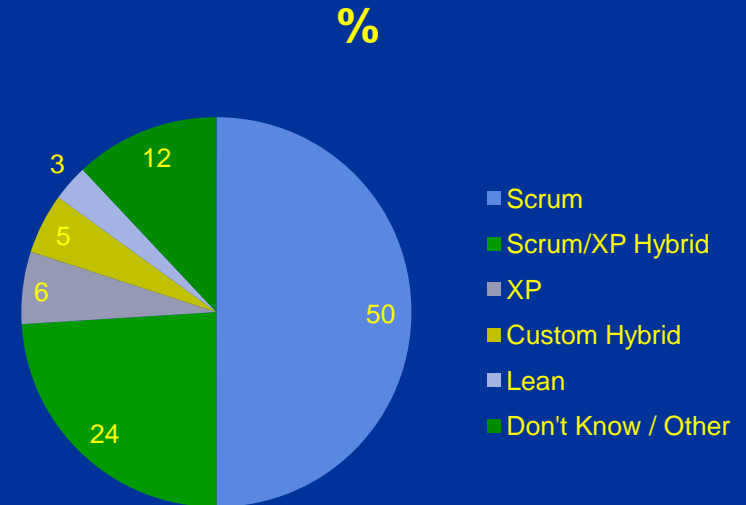
# The Foundations of Agile



# The State of the Agile World



**Based on a 2009 Forrester / Dr Dobbs survey, Agile adoption is real.**



**Based on the Version One 2009 Survey, Scrum and Scrum/XP hybrid are the most popular approaches.**

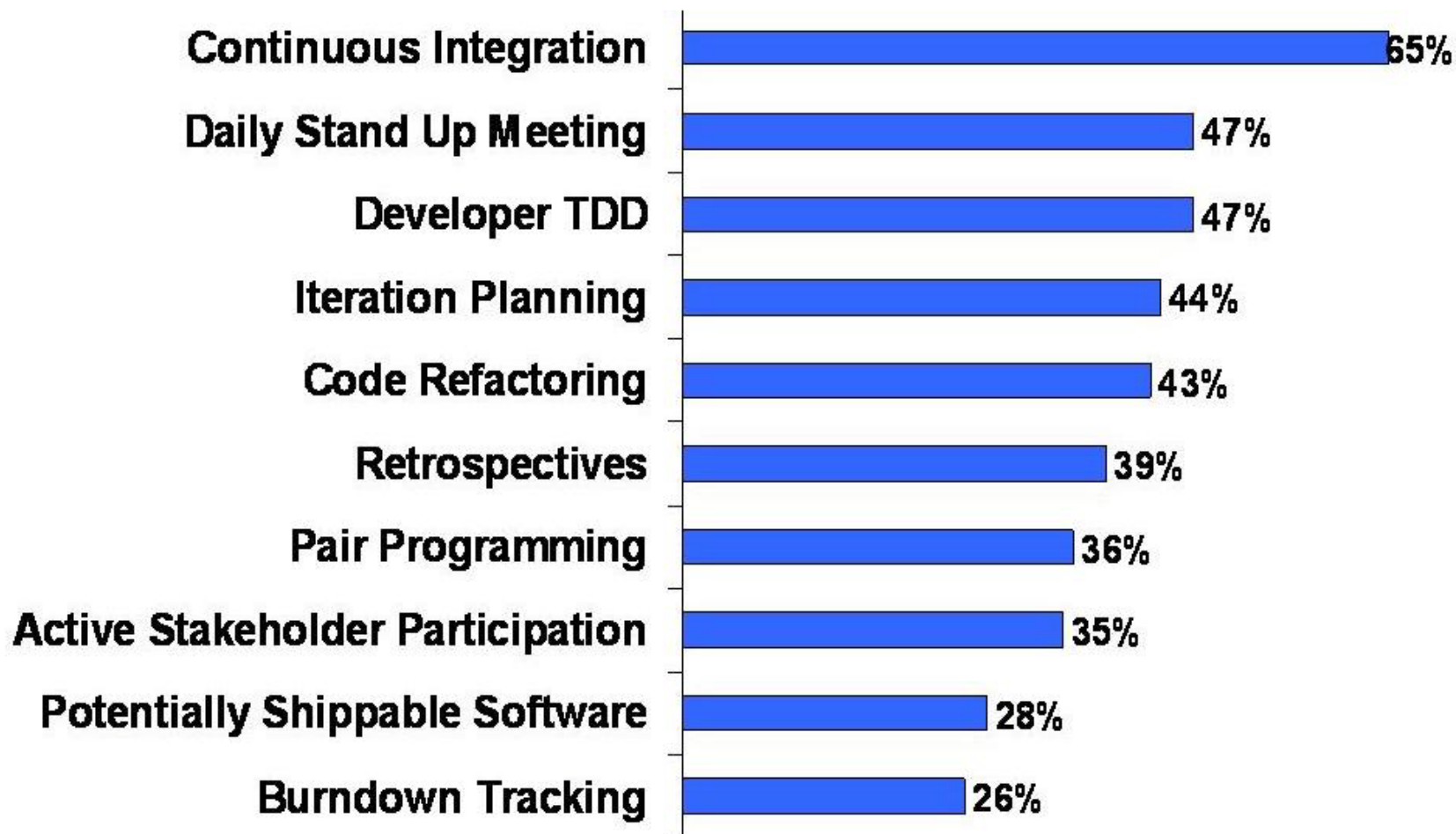


**Agile and CMMI are no longer at war with each other.**

# A Closer Look



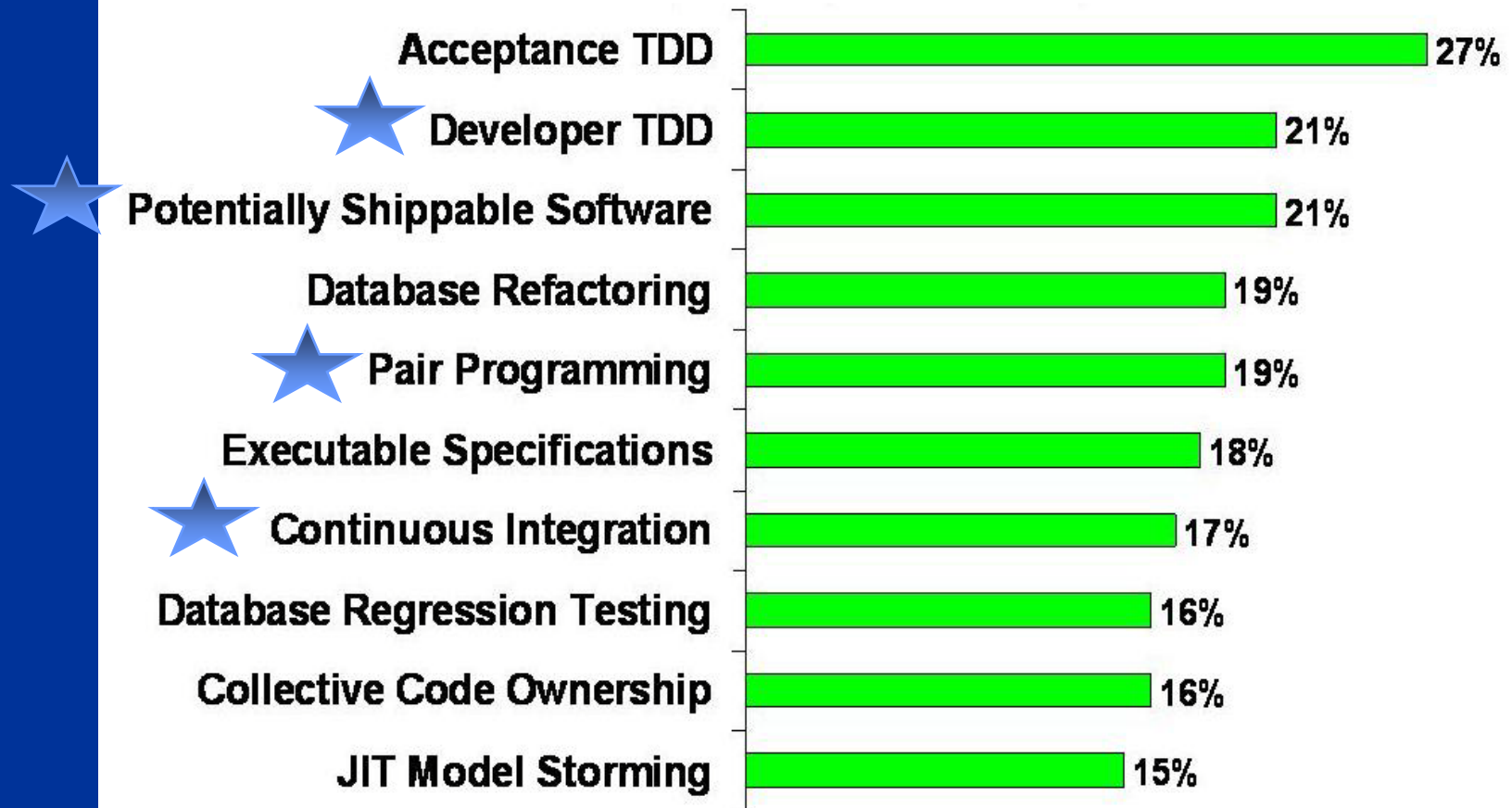
## Agile Practices That Are Most Effective (Top 10 out of 30)



Source: Ambysoft Agile Practices 2009 Survey, <http://www.ambyssoft.com/surveys/practices2009.html>  
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## Agile Practices That People Want to Adopt (Top 10 out of 30)



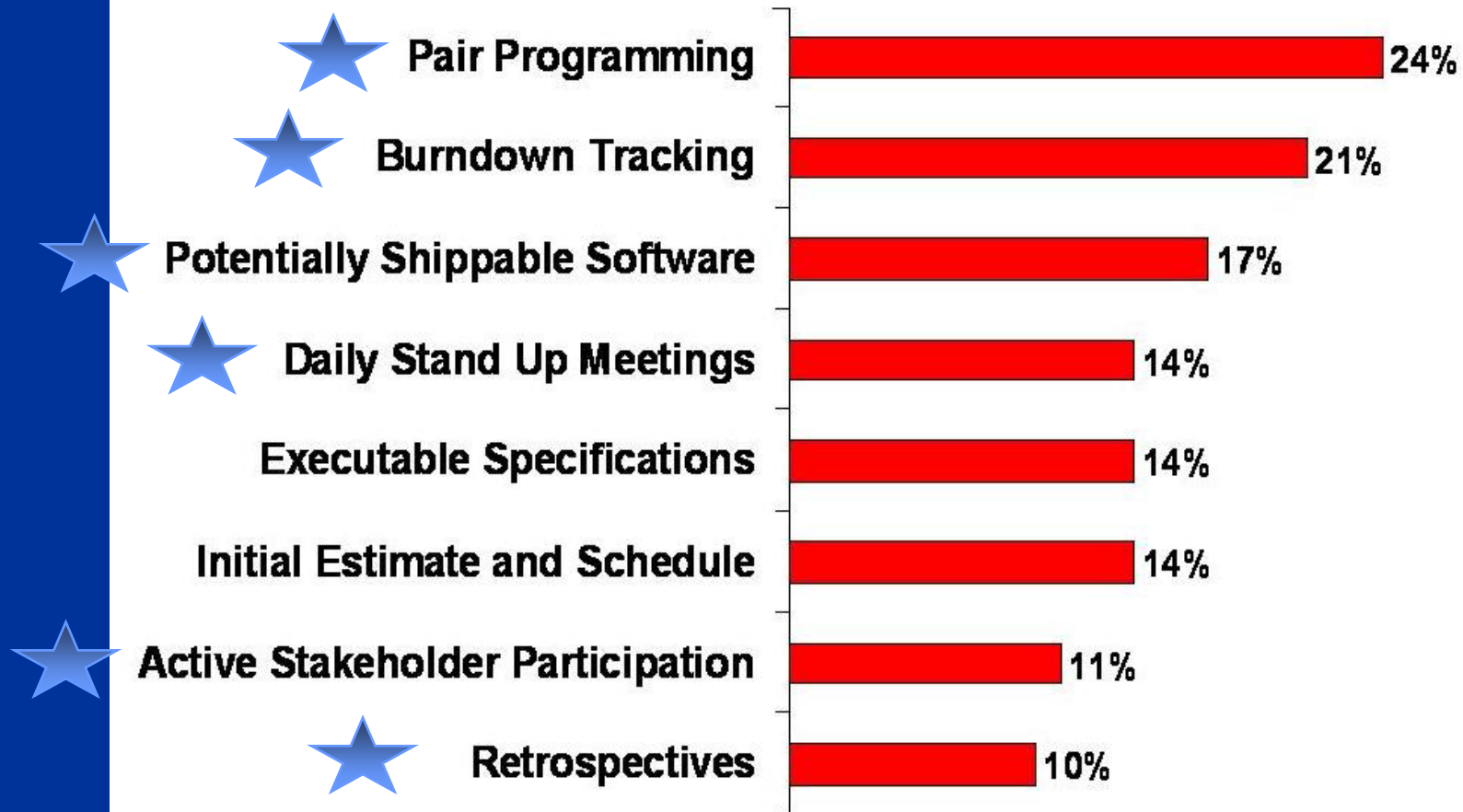
Source: Ambysoft Agile Practices 2009 Survey, <http://www.ambysoft.com/surveys/practices2009.html>  
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**= one of the top 10 effective practices**



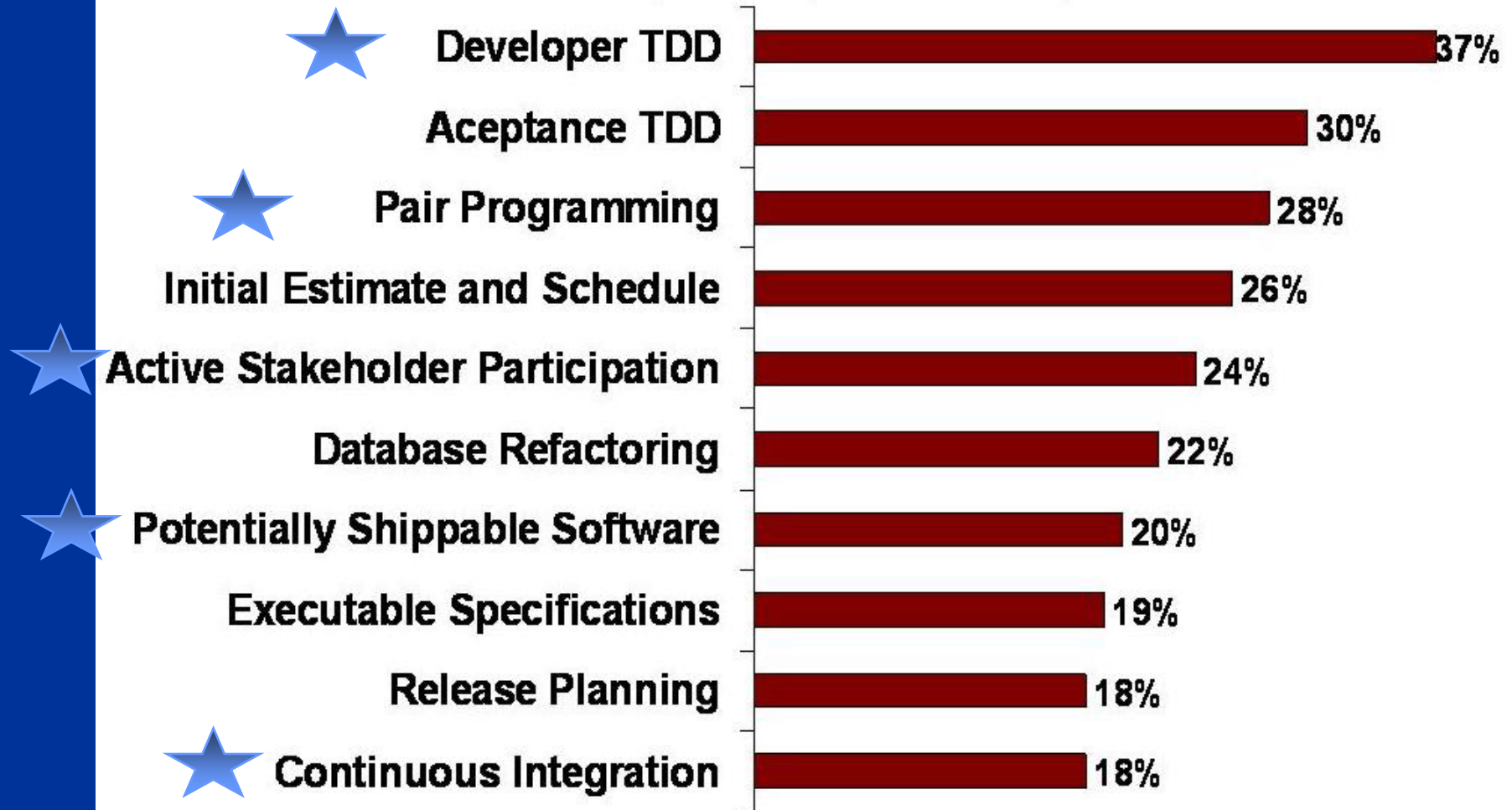
## Agile Practices Tried and Abandoned (Top 8 out of 30)



Source: Ambysoft Agile Practices 2009 Survey, <http://www.ambysoft.com/surveys/practices2009.html>  
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## Agile Practices Most Difficult to Learn (Top 10 out of 30)



Source: Ambysoft Agile Practices 2009 Survey, <http://www.ambyssoft.com/surveys/practices2009.html>  
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# Therefore



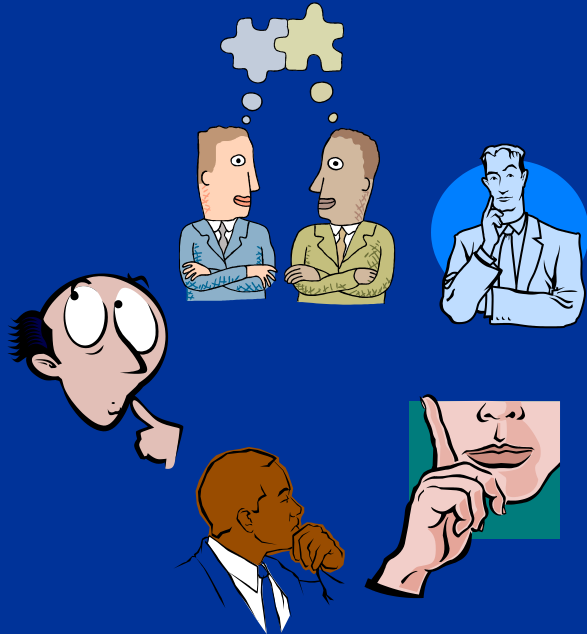
- **There must be a lot of projects that are ‘Agile, but’ are not using all of the practices known to be effective.**
  - **So, how do we assess the risk for those projects that claim to be ‘Agile, but’ are not using some of the practices known to be effective?**

# Premise:



- **Let's use CMMI as a cross-check for risk.**
  - **The lower CMMI level, the greater the risk.**
  - **Failing to satisfy goals implies more risk than failing to satisfy particular practices.**
- **When goals will not be met, alternative practices will be needed.**
  - **Hybrid approaches may be more appropriate than 'Agile, but'.**

# We're doing 'Scrum, but' we're not doing retrospectives.



## Retrospectives

- What does CMMI say?
  - CAR SG 1 Determine causes of defects.
  - CAR SG 2 Address causes of defects.



- Without retrospectives, problems other than those identified via discrepancy reports may not be identified or addressed systematically.

# We're 'Agile, but' we don't have active stakeholder participation.



- Stakeholder participation is needed for release planning, iteration planning and demonstrations.
- Stakeholders also need to be available to answer questions and clarify requirements.

- What does CMMI say?
  - REQM SG 1 Manage requirements.
  - PP SG 3 Obtain commitment to the plan.
  - IPM SG 2 Coordinate and collaborate with relevant stakeholders.
  - RD SG 1 Develop customer requirements.
  - RD SG 2 Develop product requirements.
  - RD SG 2 Analyze and validate requirements.



We need to ask what the team is doing for requirements management and analysis.

# We're doing 'XP, but' we aren't doing pair programming.



**Pair programming gives 2 sets of eyes on the code at all times.**

- **What does CMMI say?**
  - **VER SG 2 Perform Peer Reviews**



- **Agile teams that do not do pair programming need some other form of peer review.**
  - **Reviewing every week at a specific time.**
  - **Reviewing at the end of the iteration.**
  - **Using static analysis tools and test coverage tools to supplement human reviews.**

# We're 'Agile, but' we aren't doing continuous integration.



The screenshot shows a Jenkins dashboard with tabs for Dashboard, Builds, and Administration. A green banner at the top indicates a successful build: 'cce-windows passed (44 minutes ago)'. Below this, it shows 'Build Time: 27 Nov 2007 09:51 GMT +08:00' and 'Duration: 7 minutes 40 seconds'. The build is identified as 'build.8'. On the right, a 'Latest Builds' list shows a sequence of builds, with 'build.8' being the most recent. Below the banner, there are tabs for Artifacts, Modifications, Build Log, Tests, and Errors and Warnings. The 'Modifications' tab is active, showing a commit by 'bestfriendchris' that fixed an issue with the queued inactive status. The commit message is '[Chris & Gao Li] Fixed issue with queued inactive status.' and it includes two file paths: '/branches/cce/cruisecontrol/reporting/dashboard/jsunit/tests/json\_to\_css\_test.html' and '/branches/cce/cruisecontrol/reporting/dashboard/webapp/javascripts/json\_to\_css.js'.

- What does CMMI say?

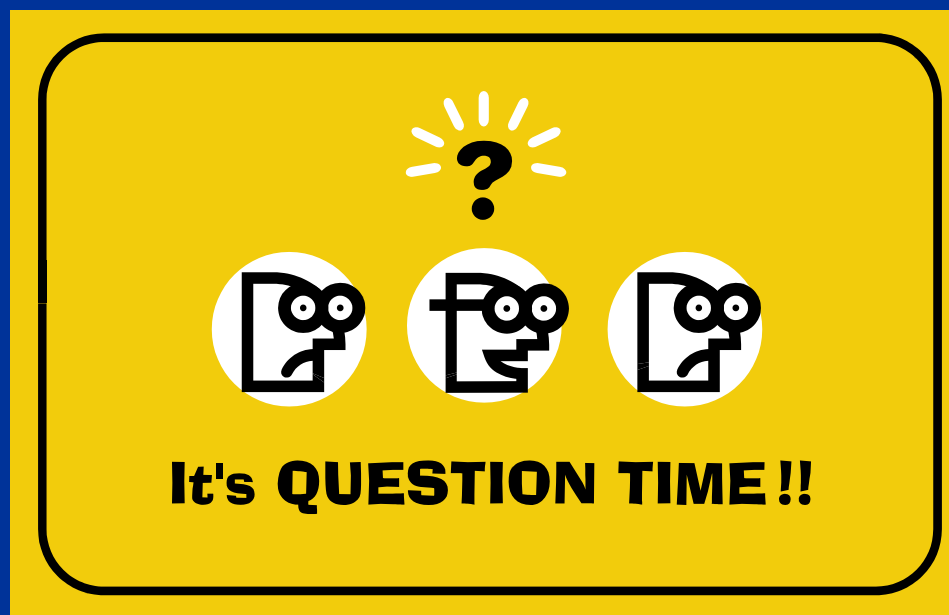
- PI SG 1 Prepare for product integration.
- PI SG 2 Ensure interface compatibility.
- PI SG3 Assemble product components and deliver the product.



# Recommendations



- **When you hear we're 'Agile, but', check what the CMMI has to say**
  - **Is a goal being missed?**
  - **Will alternative practices work?**
  - **Is it an OK modification?**
    - **E.g. virtually co-located teams are OK when supported by a communications infrastructure**





# References



- **CMMI or Agile: Why Not Embrace Both? SEI Technical Note, Nov 2008**
- **Implementing Scrum (Agile) and CMMI Together by Neil Potter and Mary Sakry, Mar 2009**
- **Love and Marriage: CMMI and Agile Need Each Other by Hillel Glazer, Crosstalk, Jan/Feb 2010**

