

Reported Benefits of Agile Development

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The major sources

1. QSMA (Michael Mah 2008)

- Rigorous comparison of 26 agile projects to a database of 7,500 primarily traditional projects
- Agile projects ranged from 26–1,000 people

2. David Rico (2008)

- Survey of 51 published academic and research papers

3. VersionOne (2008)

- Opt-in online survey of over 3,000 people

4. Dr. Dobb's Journal (2008)

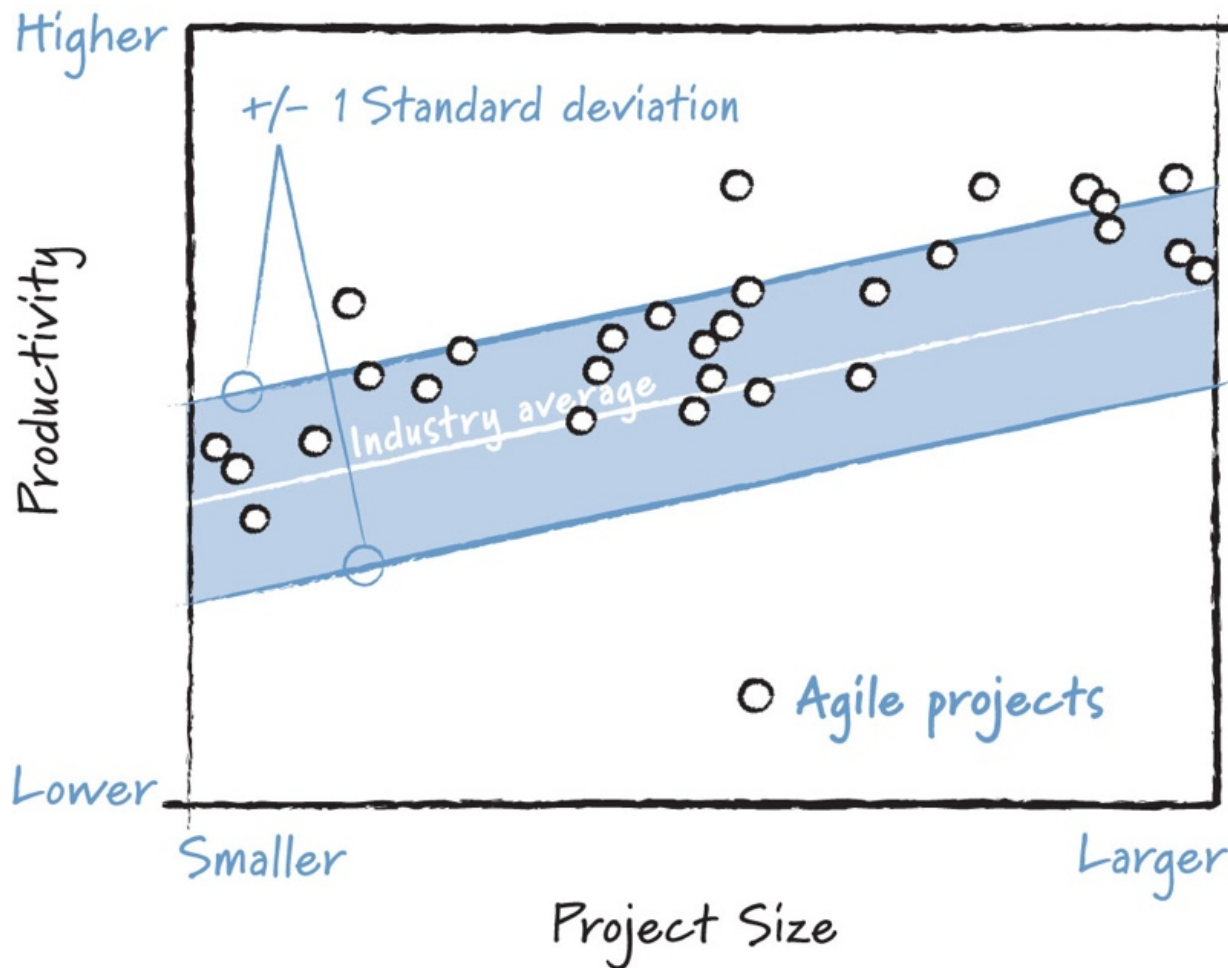
- Opt-in online survey of 642 people
- Conducted by magazine columnist Scott Ambler

Areas studied

- Higher productivity and lower cost
- Improved employee engagement and job satisfaction
- Faster time to market
- Higher quality
- Improved stakeholder satisfaction



Improved productivity



Agile projects are 16% more productive at a statistically significant level of confidence.

Source: Mah 2008.

- Dr. Dobb's Journal
 - 82% said productivity is somewhat or much higher
- VersionOne
 - 23% said productivity was significantly improved
 - 50% said productivity was improved



Cost

Development Cost	DDJ	VersionOne
Improved	32%	30%
Significantly Improved	5%	8%



Rico's literature survey

	Lowest Reported Improvement	Median	Highest Reported Improvement
Productivity	14%	88%	384%
Cost	10%	26%	70%



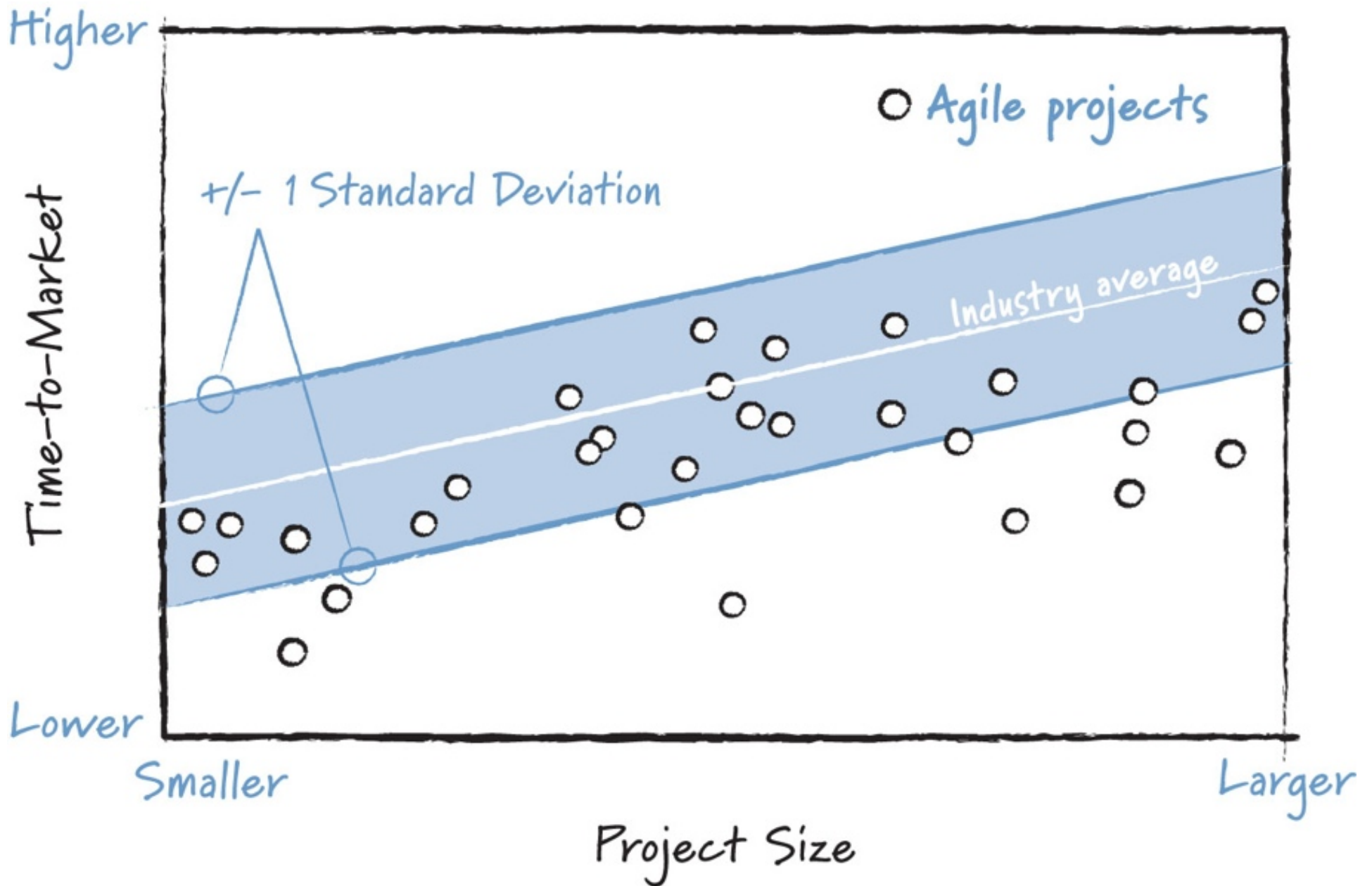
Higher job satisfaction

- Fifteen months after adopting Scrum, 86% of Salesforce.com employees were having a “good time” or the “best time”
 - Only 40% said that before adopting Scrum
 - 92% would recommend agile to others
- Perhaps employees like agile because there's 2/3rds less overtime according to University of Calgary research



Faster time to market

- VersionOne study found
 - 64% said time to market improved
 - Another 23% said it was significantly improved
- Michael Mah found
 - Agile projects have a 37% faster time to market at a statistically significant level of confidence



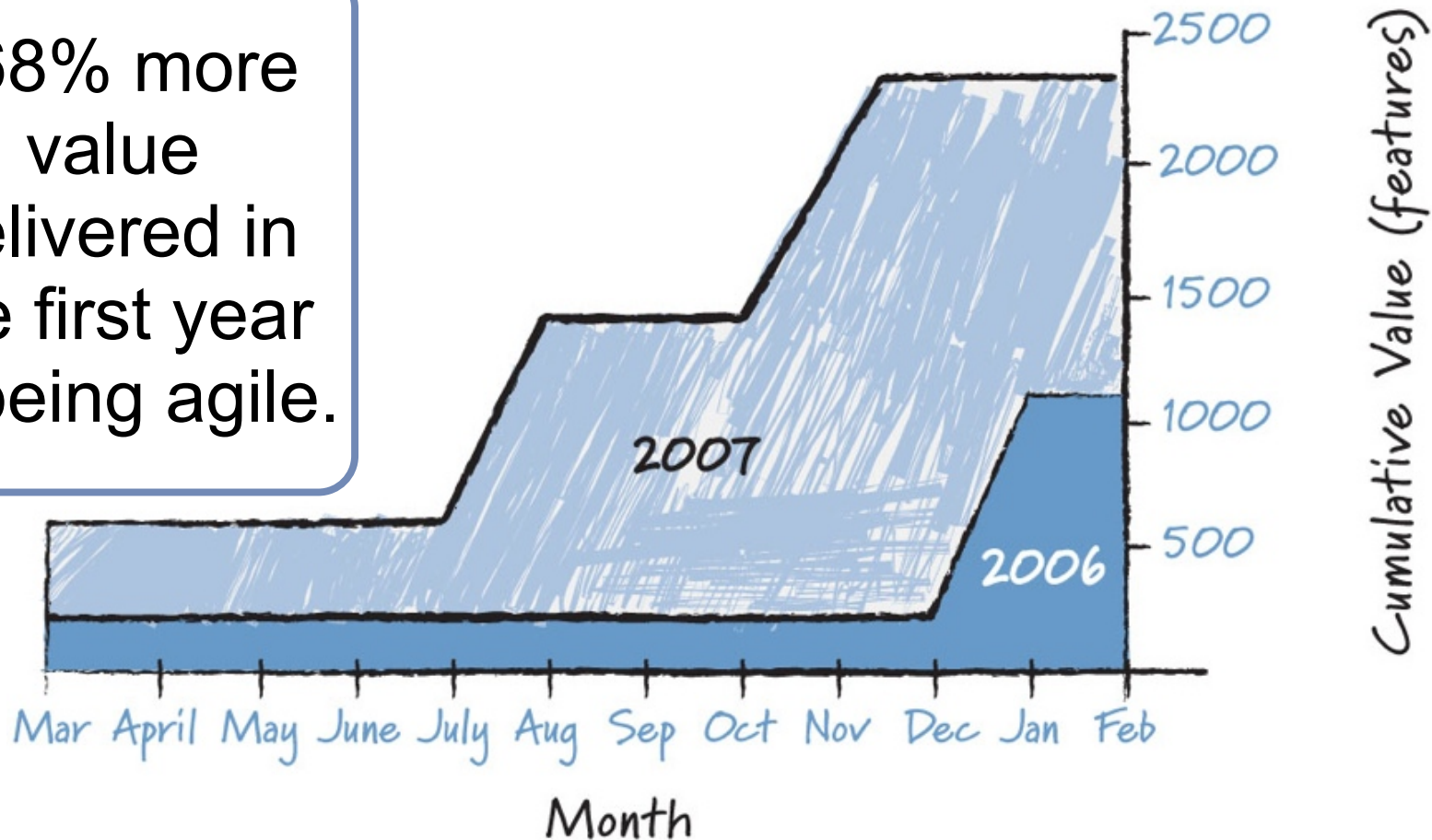
Source: Mah 2008.



Salesforce.com

Cumulative Value (features) delivered in Major Releases

568% more value delivered in the first year of being agile.



Source: Greene and Fry 2008.



Higher quality

- Rico
 - Minimum quality improvement of 10%
 - Median quality improvement of 63%
- ePlan Services
 - Over first nine months of using Scrum, defect rate per 1,000 non-comment lines of code went down 70%

VersionOne study

- Quality
 - 44% said quality had improved
 - Another 24% said quality improved significantly
- Fewer defects
 - 84% said defects had gone down by 10% or more
 - 30% said defects were down by 25% or more

Improved stakeholder satisfaction

- Dr. Dobb's
 - 47% said stakeholder satisfaction was “somewhat higher”
 - Another 31% said it was “much higher”

VersionOne study

	Improved	Significantly Improved
Enhanced ability to manage changing priorities	41%	51%
Improved project visibility	42%	41%
Improved alignment of IT and business goals	39%	27%
Reduced project risk	48%	17%

Sources

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Sources

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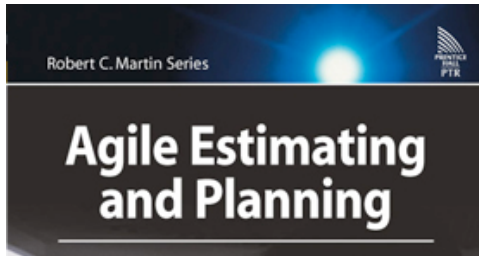
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