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Product Development and Project Management Tools

Research Report

Project management challenges – in their words

What are the biggest project management challenges that impact product development at your company?

- *Complex projects developed by a widely dispersed engineering team across the world while attempting to innovate and integrate new technologies on a limited budget and timeline.*
- *Understanding product requirements and how any changes affect resources and timeline*
- *The integration of data on time from the several different sources from which it is received onto a single platform so that it may be assessed together.*





Notable Insights

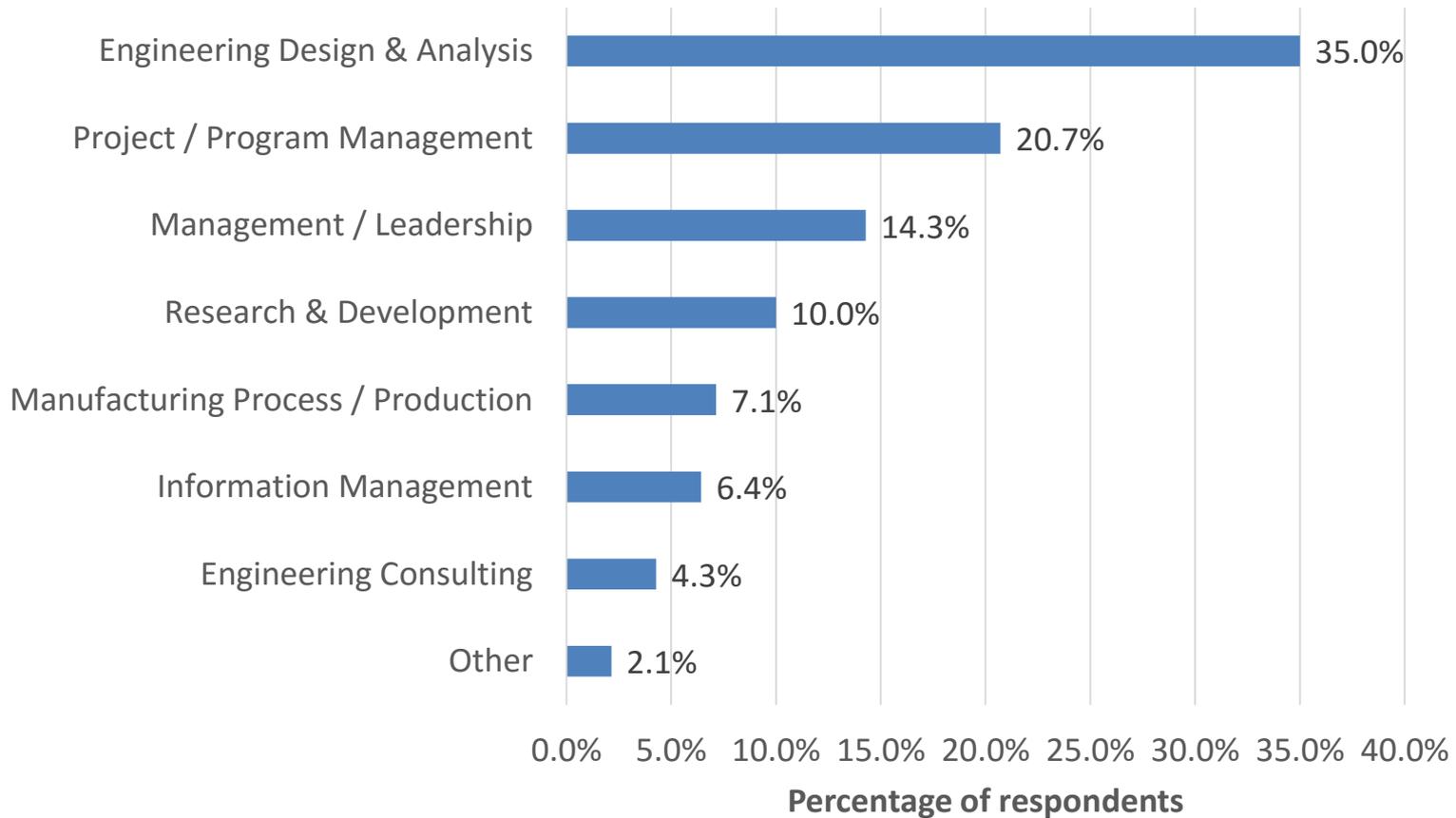
- There is a large gap between how important project management is to a successful product launch and respondent's ratings of how effective their company is at actual execution.
- Adoption of PLM systems is a strong predictor of the effectiveness of project management activities
- Survey respondents overwhelmingly (82%) believe that systems would work better if project tasks were updated automatically when product development data (models, specs, etc) were updated



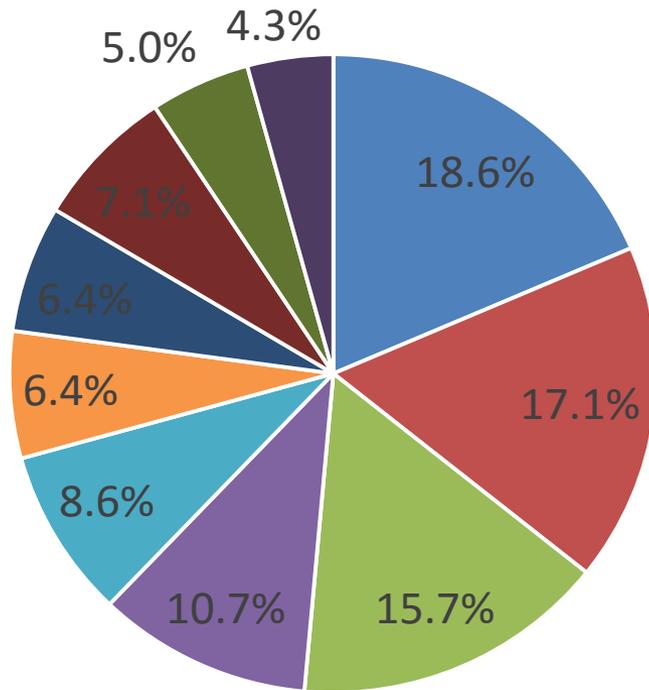
DEMOGRAPHICS & COMPANY STATISTICS

n=140

Job Function



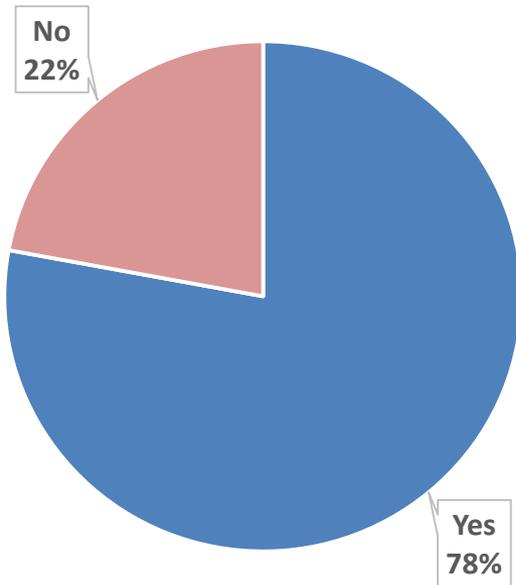
Industry



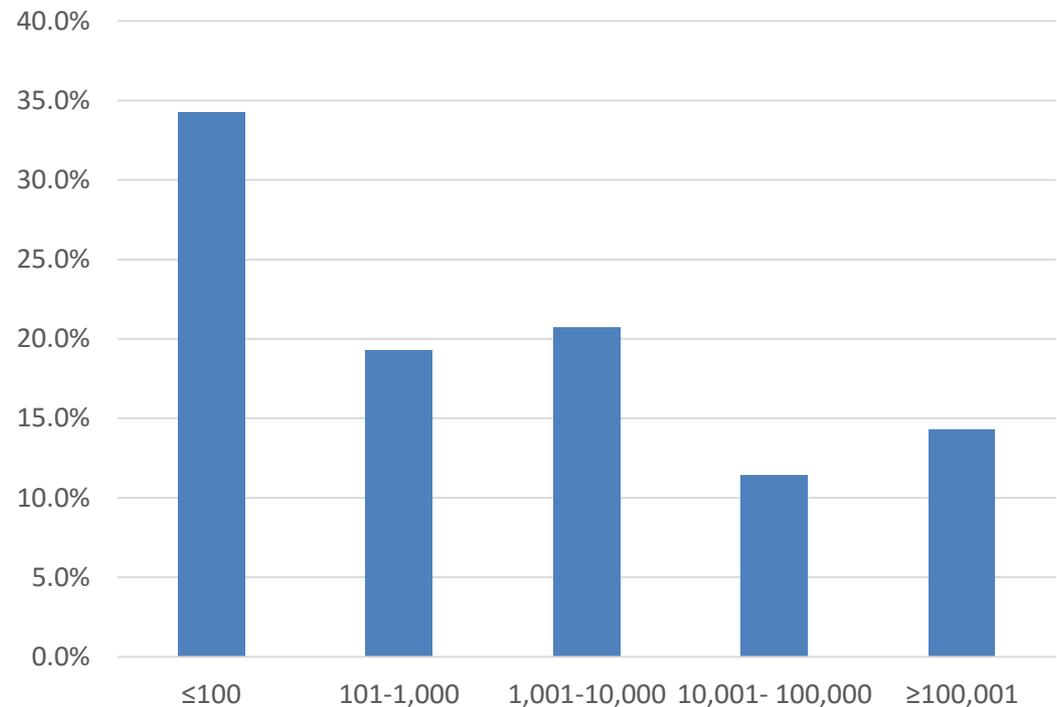
- Architecture, Engineering and Construction
- Hi-Tech
- Industrial Equipment
- Aerospace & Defense
- Energy, Process & Utilities
- Transportation & Mobility
- Other
- Consumer Goods & Retail

Number of products

Does your company offer several variants of its products to address different market needs?

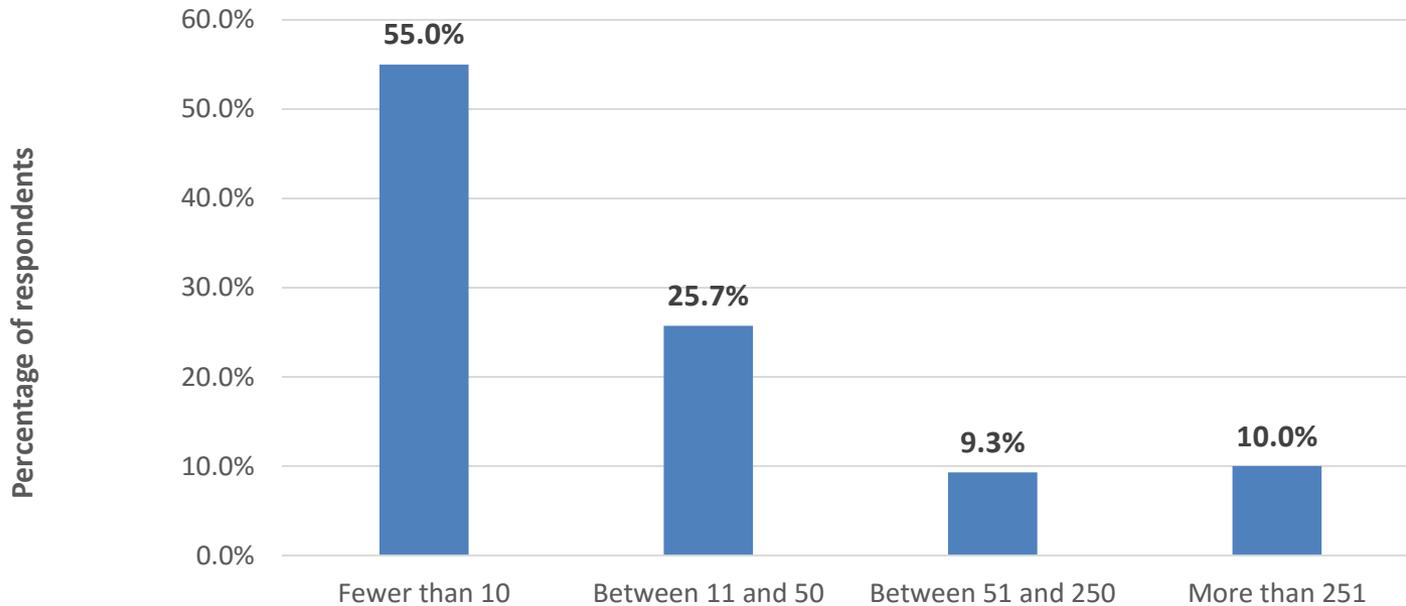


How many SKUs does your organization have?



Number of new product launches

How many new products does your company launch each year ?



Number of new product launches per year



IMPORTANCE OF PROJECT MANAGEMENT VS EFFECTIVENESS OF CURRENT PRACTICES



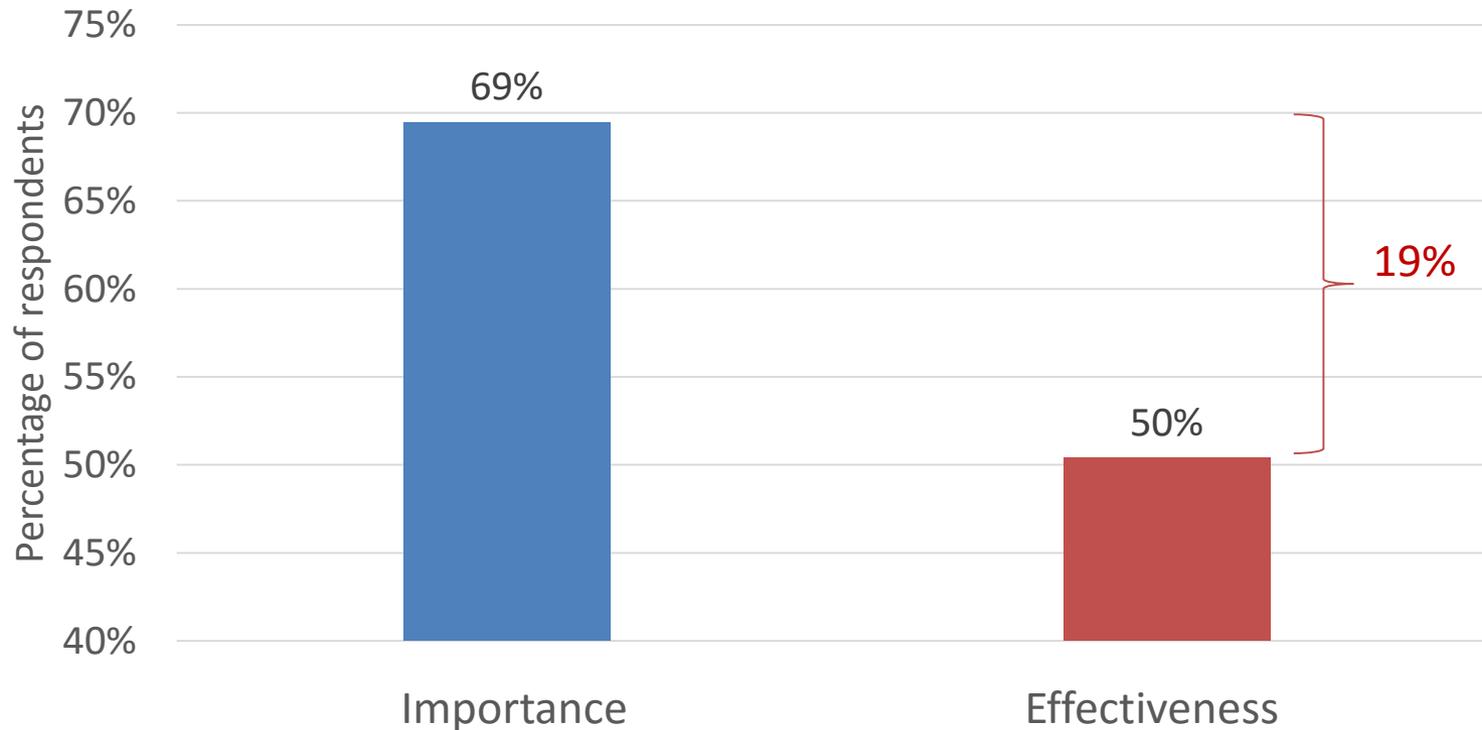
Challenges in project management - #1

Understanding how requirement changes impact a project's schedule and resources

David V. says biggest challenge – “Late addition of product and project requirements; incomplete requirements gathering up front.”

Question: How strongly does understanding how requirement changes affect a project's schedule and resources affect your company's successful launch of products? And how effective is your company at this activity?

Importance to success versus company execution effectiveness





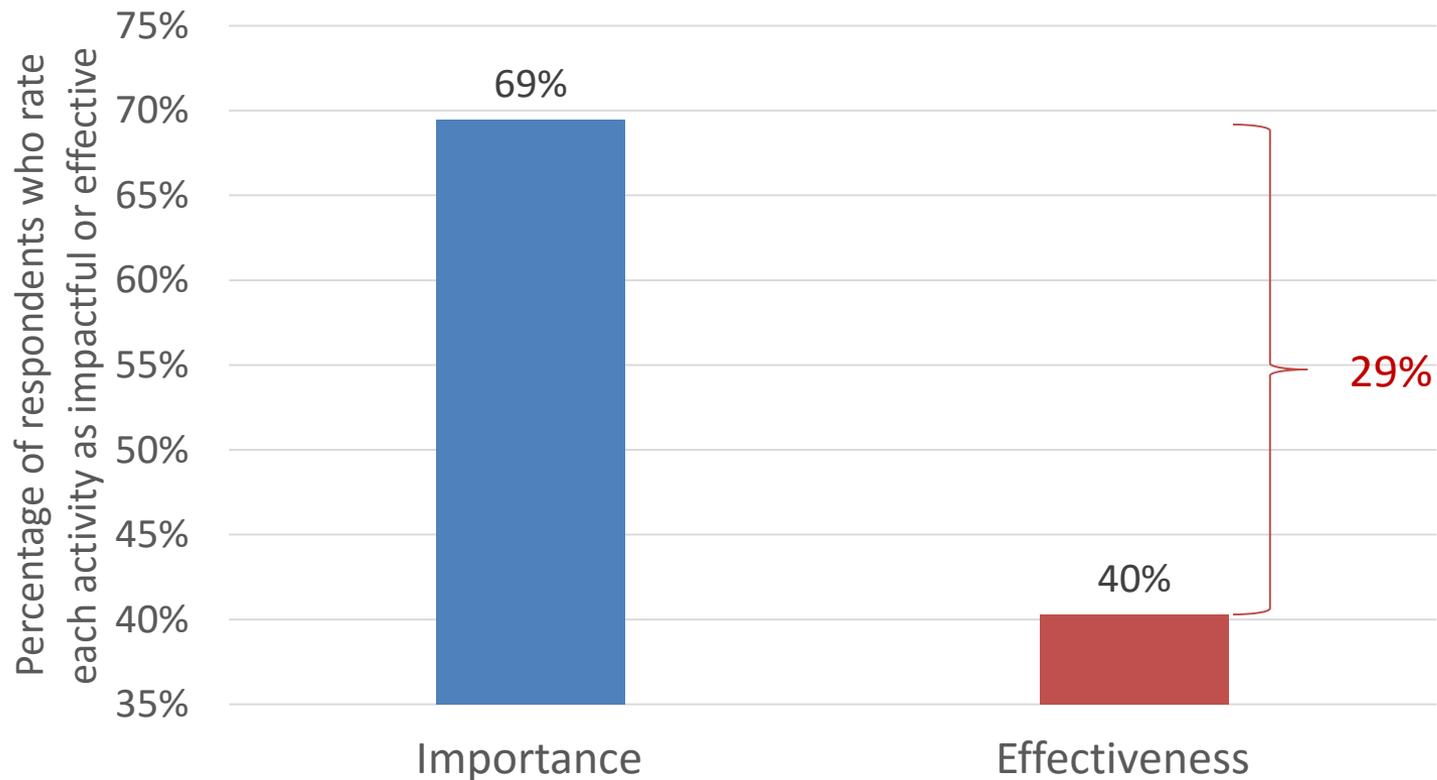
Challenges in project management - #2

Getting accurate and consistent project task updates with proof of completion

Victor M. says biggest challenge – “Integration between the Task follow up tools and the databases of files and models that are the evidence of this tasks. “

Question: How strongly does getting accurate and consistent project task updates with proof of completion affect your company's successful launch of products? And how effective is your company at this activity?

Importance to success versus company execution effectiveness



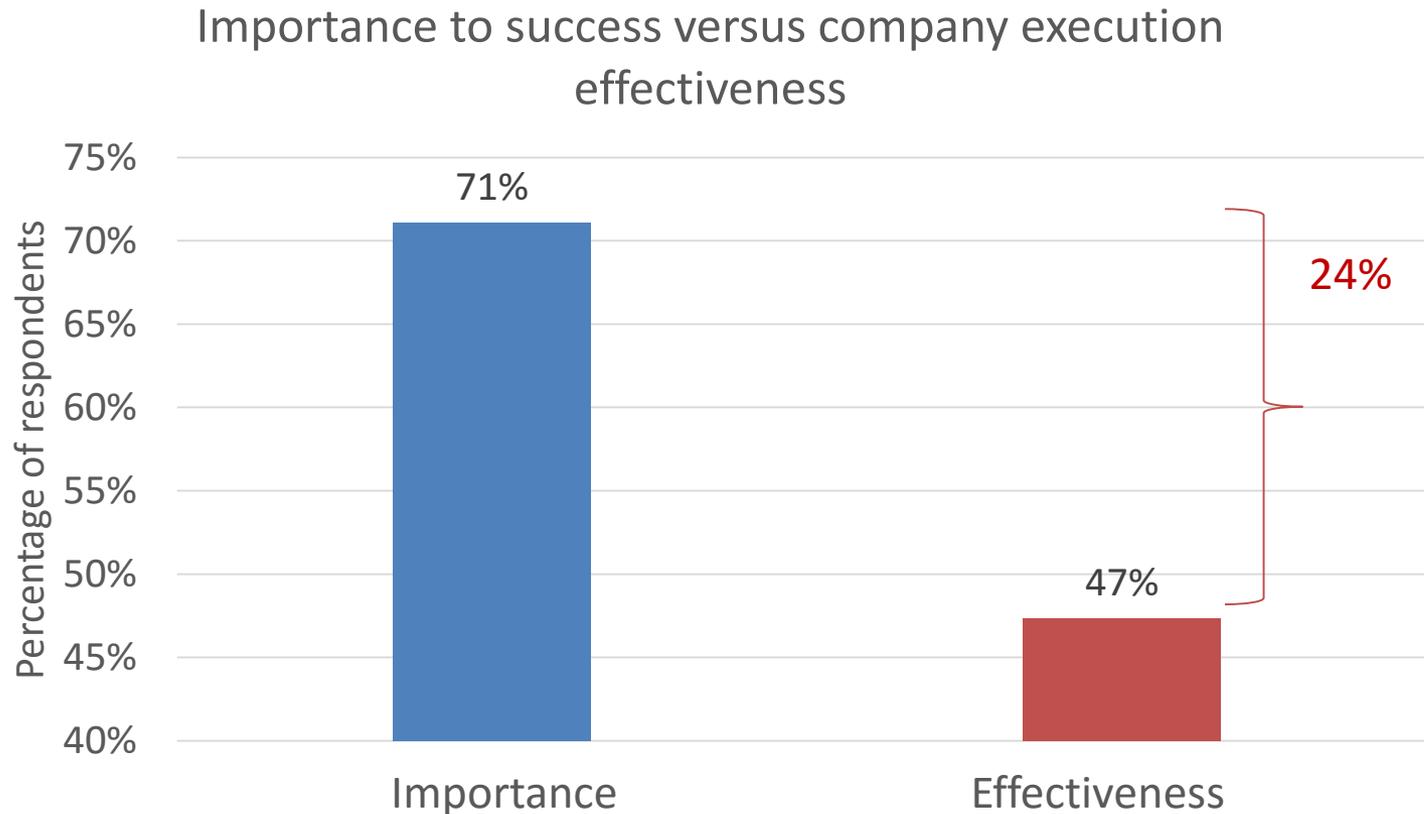


Challenges in project management - #3

Identifying product development issues that are causing project delays

Syed A. says biggest challenge – *“Complexity of projects and we are unable to analyze the reason for cost and schedule overshoot”*

Question: How strongly does identifying product development issues that are causing project delays affect your company's successful launch of products? And how effective is your company at this activity?

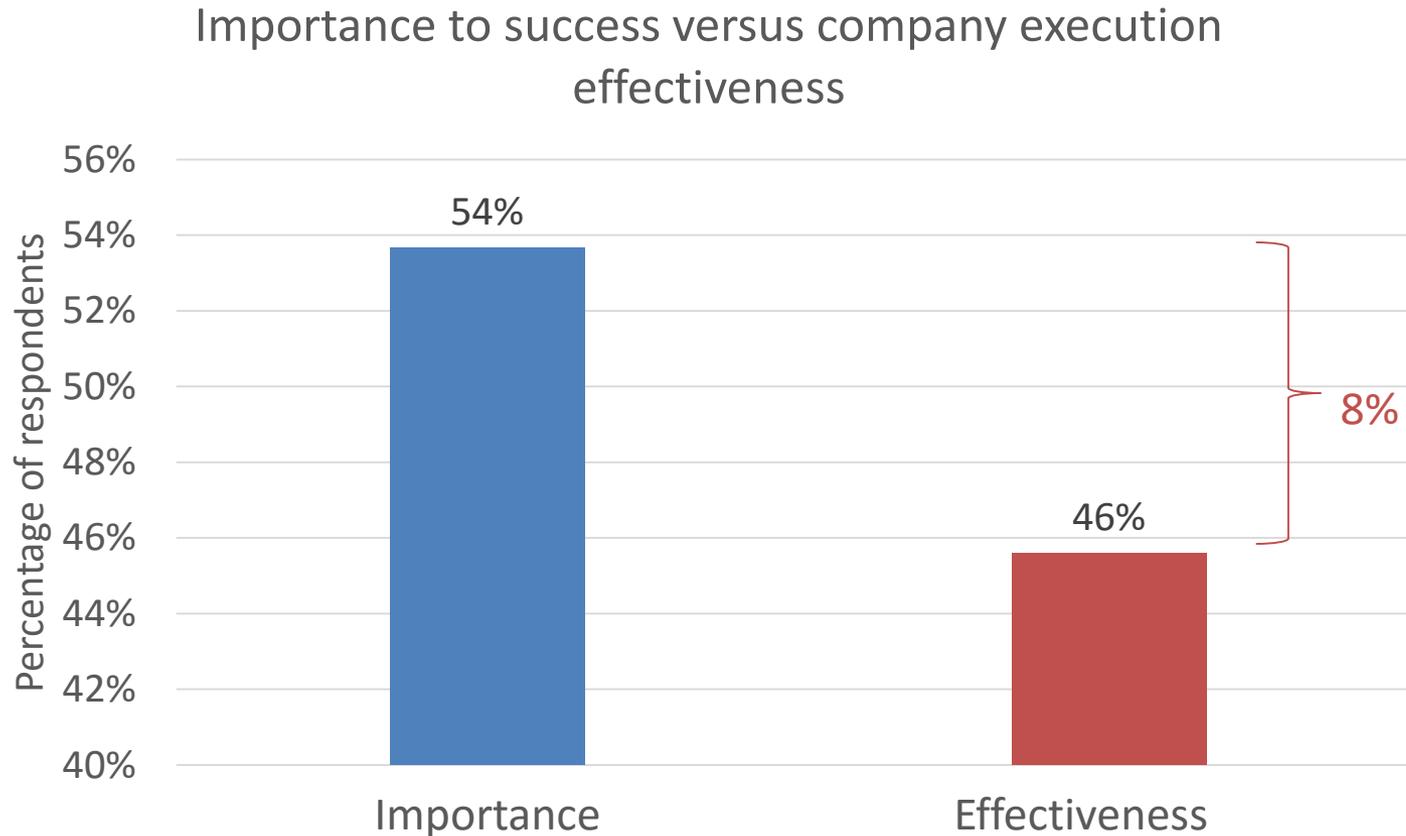


Challenges in project management - #4

Executing the simultaneous launch of multiple variants of a product

Ray C. says biggest challenge – *“Tracking current projects progress is laborious, IT restricts web app use heavily, issues are translated verbally or by written reports. Not much automatic as far as I know”*

**Question: How strongly does executing the simultaneous launch of multiple variants of a product affect your company's successful launch of products?
And how effective is your company at this activity?**

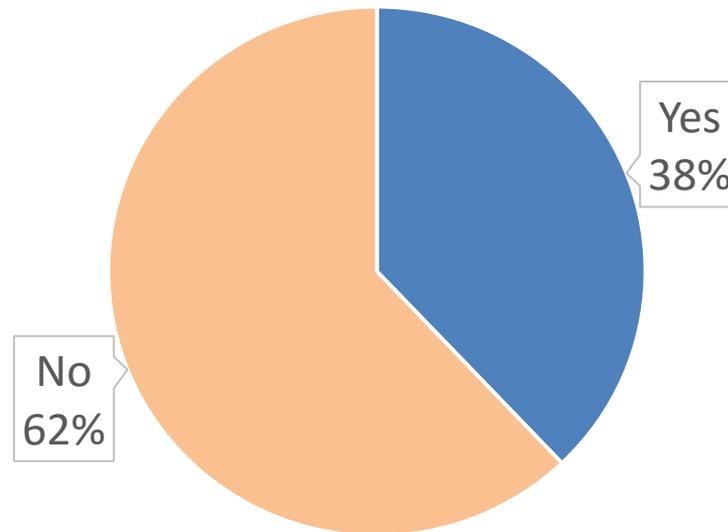




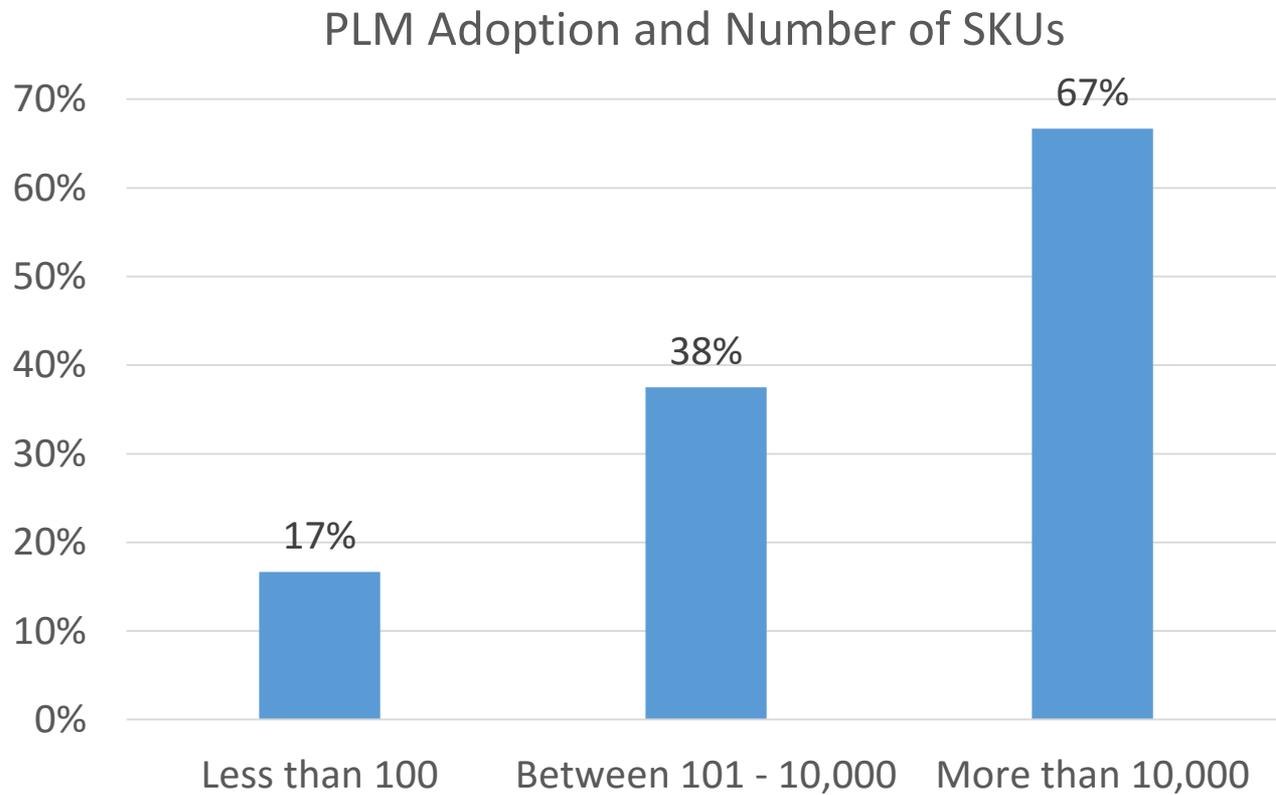
PROJECT & PORTFOLIO MANAGEMENT SYSTEMS

Adoption of PLM Systems

Does your company currently use a PLM system for managing product data and development processes?

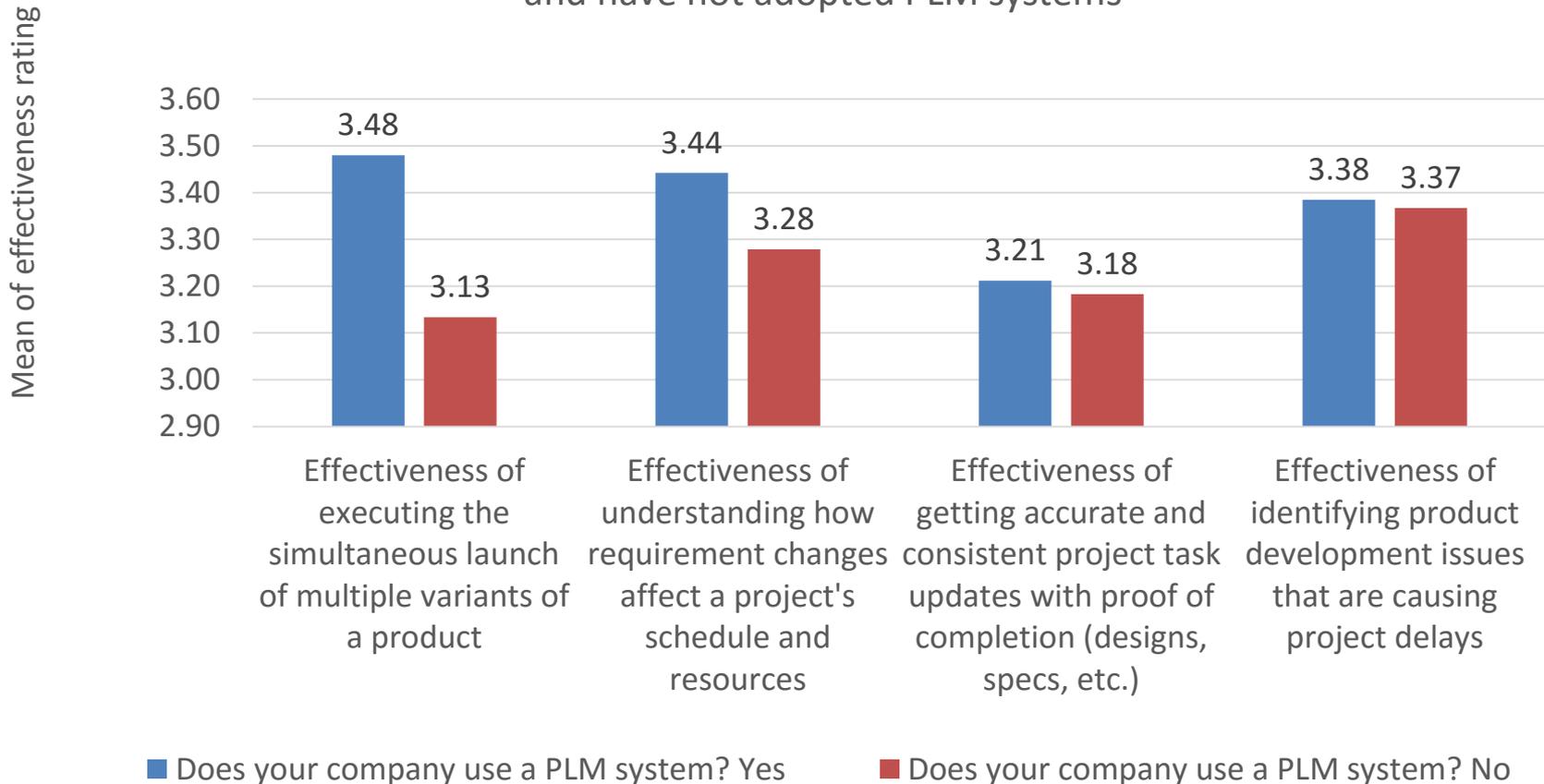


Companies with the most SKUs are most likely to adopt PLM



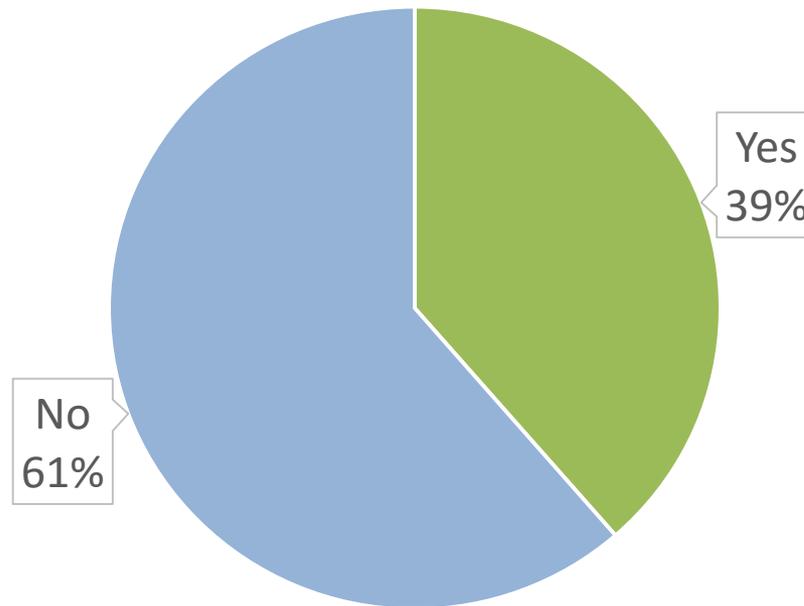
Adoption of a PLM system correlates with higher project execution ratings

Effectiveness of project management activities between companies who have and have not adopted PLM systems



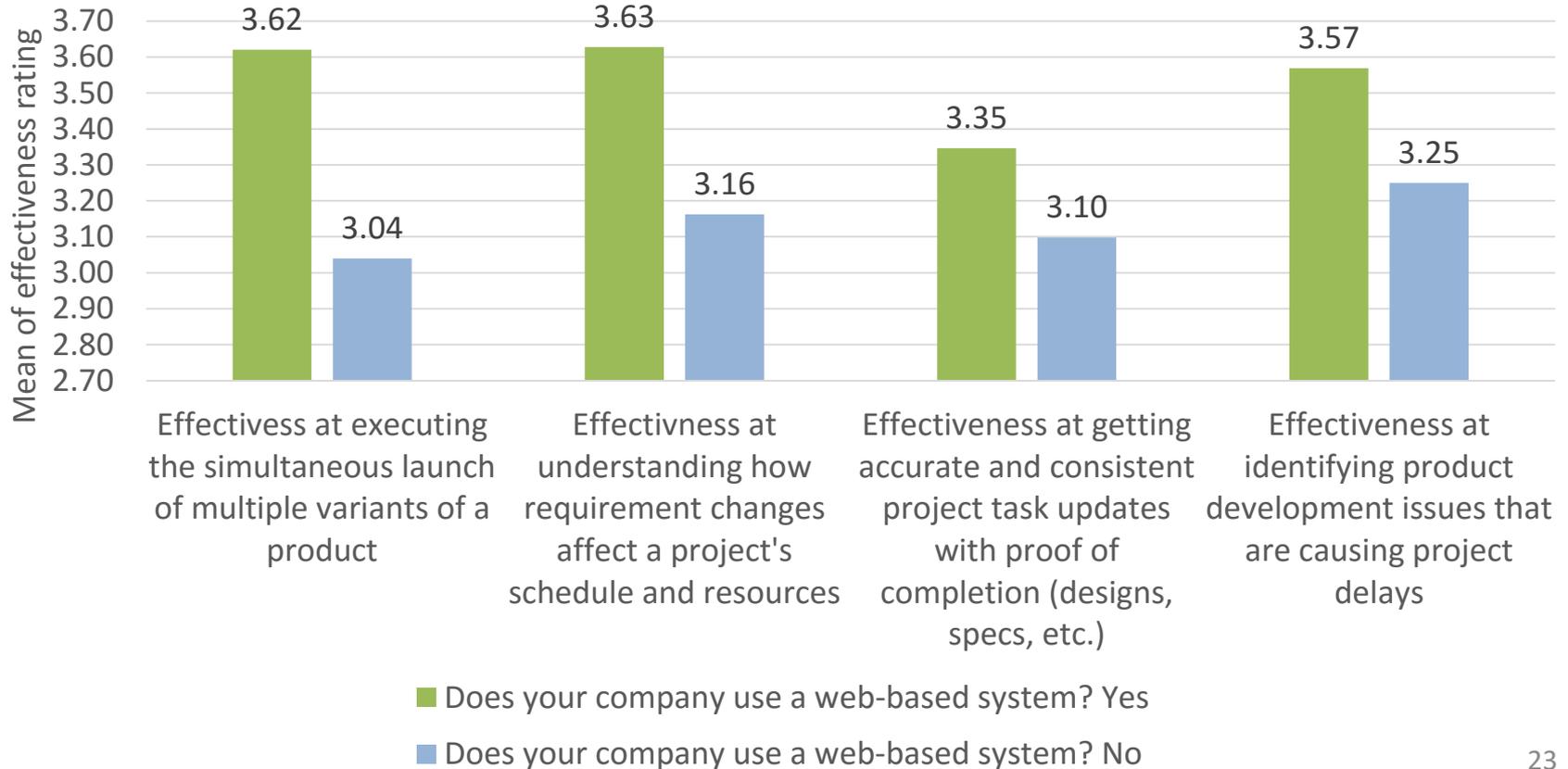
Web-based systems gaining some traction

Does your company currently use a Web-based system to manage projects?



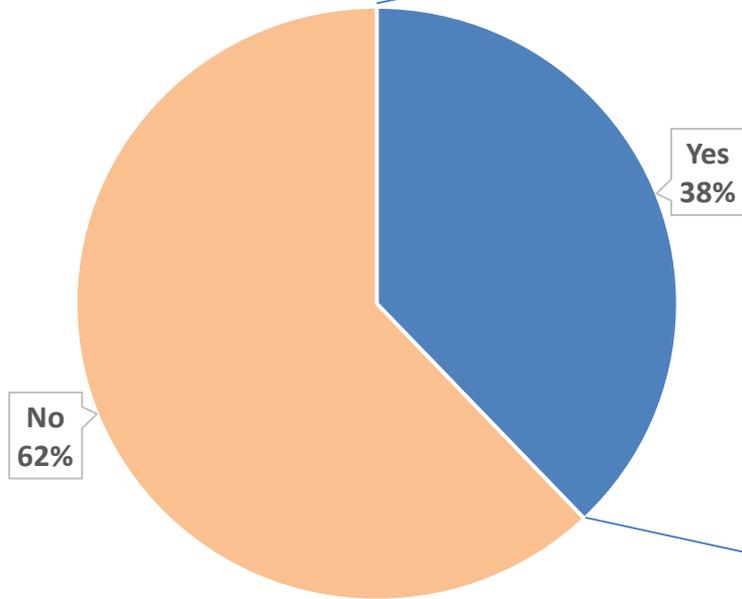
Adoption of web-based systems correlate strongly with higher project management effectiveness

Effectiveness of project management activities between users of web-based and those without



Level of Integration of Project and PLM Systems

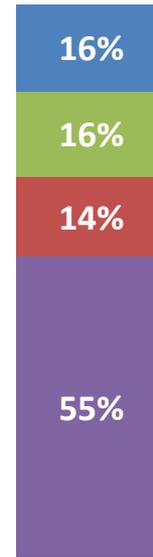
Does your company currently use a PLM system for managing product data and development processes?



Please select the project management and PLM system that best describes your current environment

Integrated:
31%

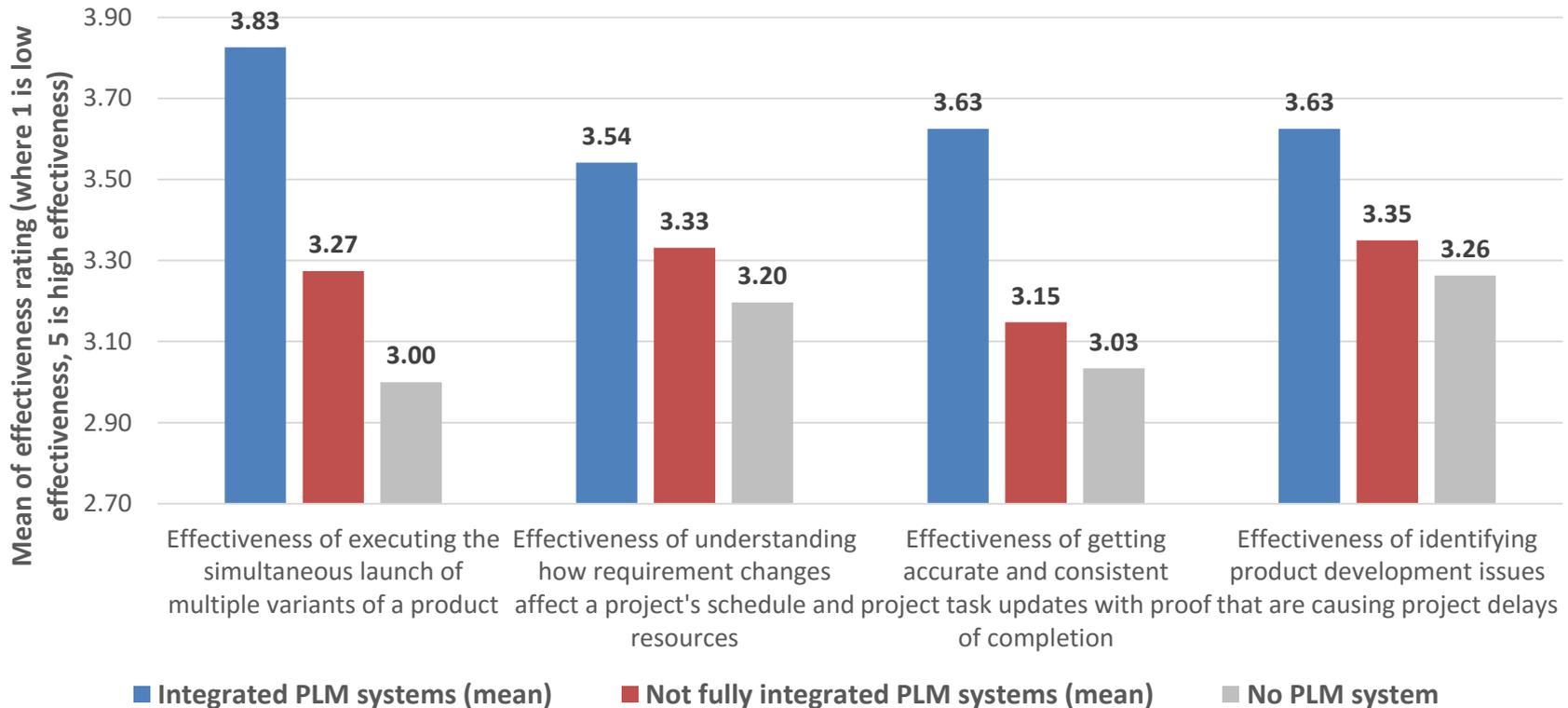
Not fully integrated:
69%



- Project management and PLM systems are from the same vendor and are fully interoperable
- Project management and PLM systems are from different vendors and are integrated
- Project management and PLM systems are from the same vendor but are not fully interoperable
- Project management and PLM systems are from different vendors and are not integrated

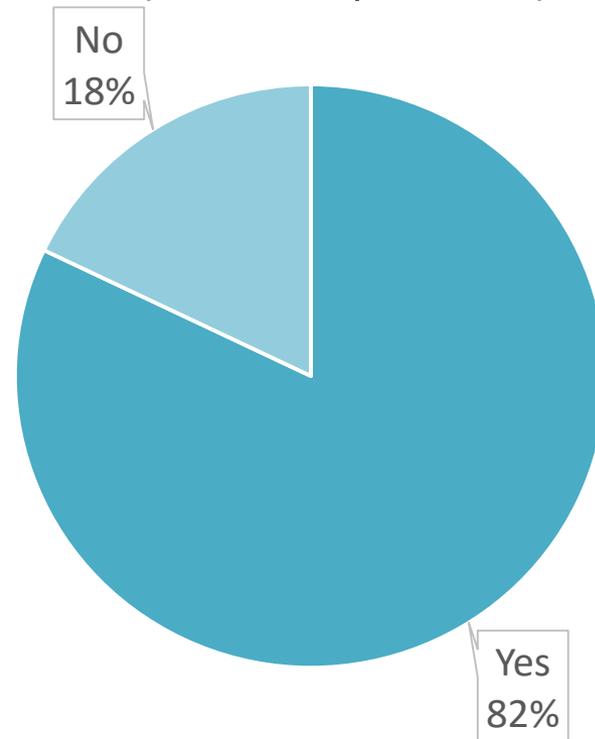
More integrated PLM and Project management systems are most highly correlated with effective project management

Effectiveness of project management activities by PLM environment



Most survey respondents say that they would benefit from real-time product development data

Would your project management system work better if project tasks were updated automatically when product development data (models, specs, etc) were updated?





ENGINEERING.COM RESEARCH

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