

What do engineers think?
The impact on a safe design culture
- comparison of conference attendees
and engineering students

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Engineers and other designers

1. What are they meant to be doing?
(responsibilities)
2. Design objectives – what's the priority?

Survey

- Conference attendees
- Total returns $n=57$
- Responses for each question $n=52-56$
- Questions about the role of engineers when “designing” an item

And the winner is...

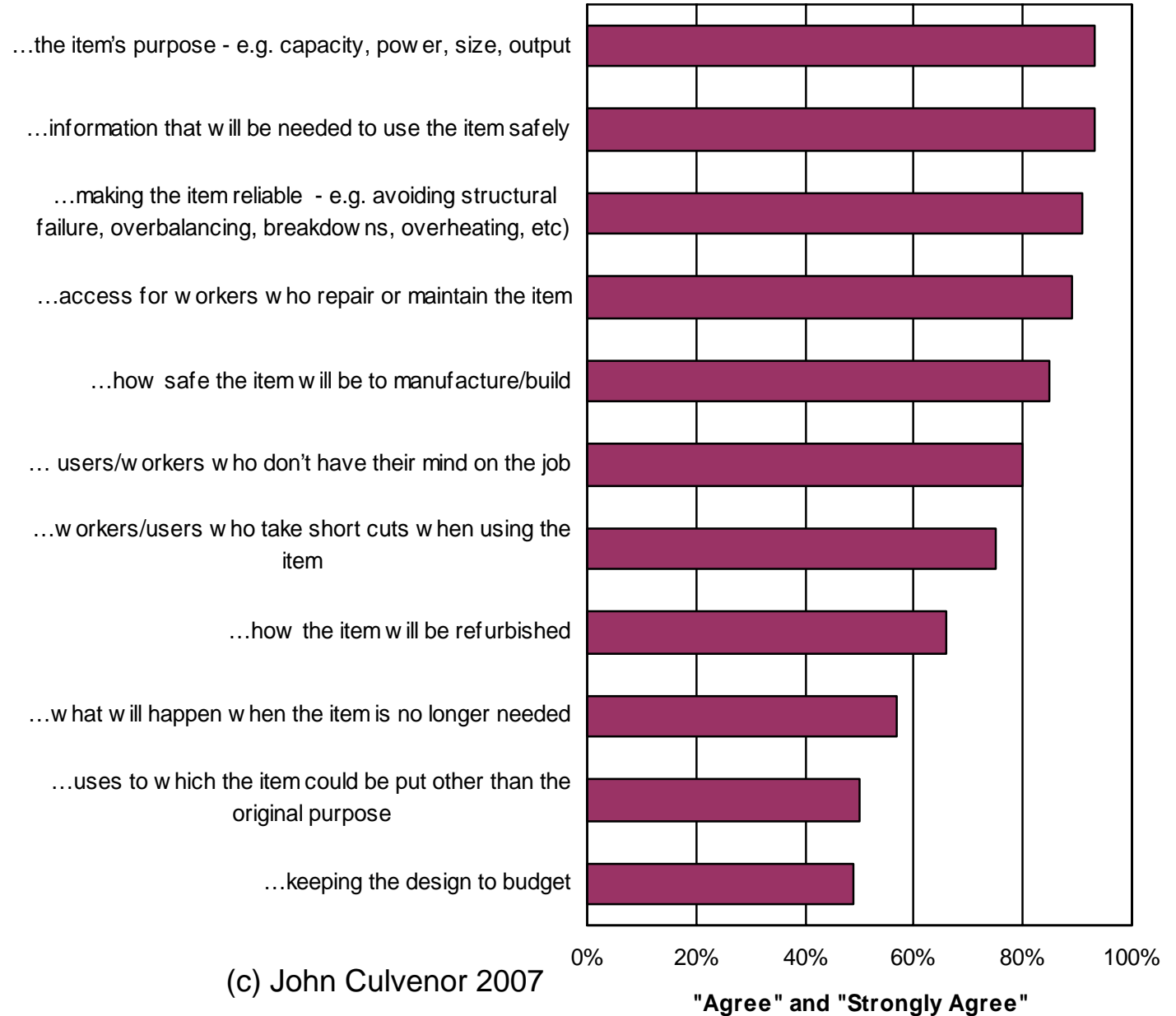
- a “tie”
 - making the item reliable
 - Information to use it safely
 - 93% agree

And the booby prize...

- Keeping the design to budget
- 49% agree

**Conference attendees
n=52-56**

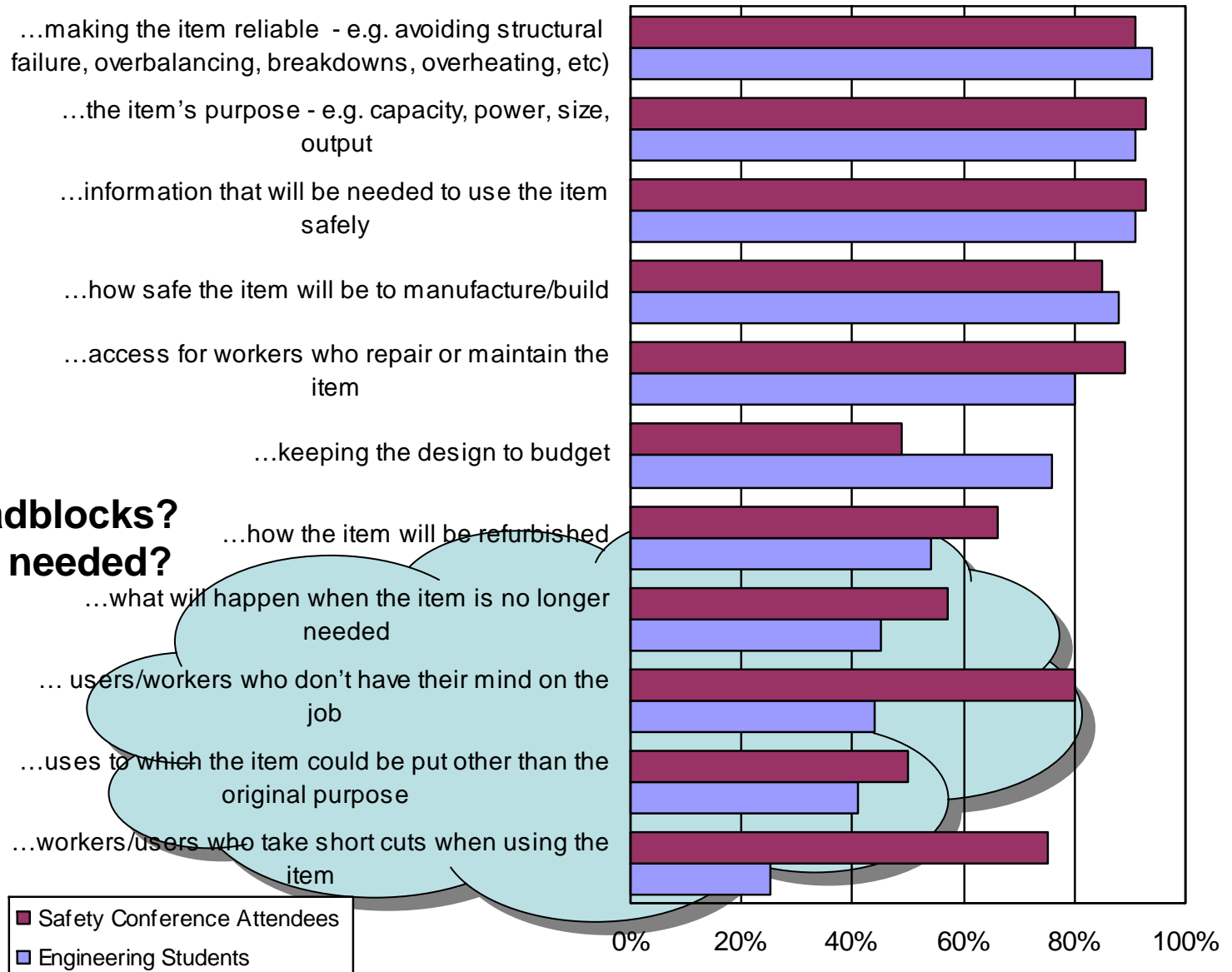
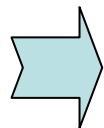
When designing an “item”, it is an engineers responsibility to design/allow for ...



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Conference attendees (n=52-56) v Engineering students (n=60-70)

- **Safe design roadblocks?**
- **Culture change needed?**



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"Agree" and "Strongly Agree"

Results

- Compared to engineering students safety conference attendees showed
 - Greater agreement with the need for “error proofing”, i.e.
 - “users/workers who don’t have their mind on the job”=80%
 - “Users/workers who take short cuts”=75%
 - Less agreement that budget is important (49%)
- While agreement on some key issues is greater than among students, on some issues it remains moderate
 - For instance agreement was moderate that engineers should have long term vision about use and end of life
 - “uses other than the original purpose”=50%
 - “what happens when the item is no longer needed”=57%
 - “what happens when it needs to be refurbished”=66%