

# CAN LAST PLANNER SYSTEM HELP TO OVERCOME THE NEGATIVE EFFECTS OF DESIGN-BID-BUILD?

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# SUMMARY

- 9 interviews with LPS practitioners from the AEC industry have been conducted.
- The interviewees find that DBB has negative effects on construction projects.
- The interviewees name several ways of improving DBB contracts:
  - building a lean culture in a project or setting up a management system that acknowledges lean ideals;
  - using assessments of the teams;
  - using “add-ons” to the DBB contracts: FAC-1 or CMAR.
- LPS cannot help to overcome all the problems created by DBB, but it can support the ways of improving DBB.

# Interviewees: Party Represented and Current Position

Interviewee's Code Number	Party that Interviewee Represents in the AEC Industry	Interviewee's Position
1	General contractor	Development manager
2	General contractor	Director of lean construction
3	Client, General contractor	Lean construction consultant
4	Client, Designer, General contractor	Consultant
5	Client	Consultant
6	Client	Consultant
7	Academia	Professorial position
8	General contractor	Consultant
9	General contractor	Consultant

Interviewees

Negative effects of DBB

Ways to overcome negative effects

How LPS supports building lean culture

Discussion and Conclusion

# Negative Effects of DBB

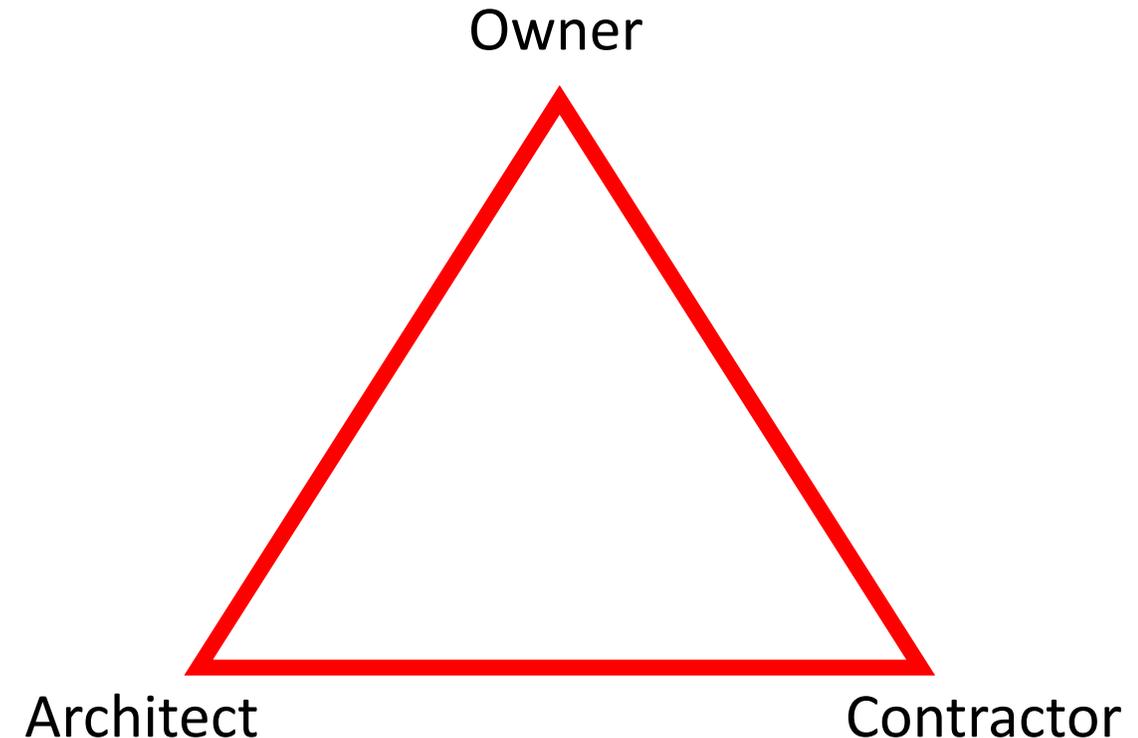
- Effects from contractual separation.
- Effects from separation in time.
- Effects of the “lowest bid wins” mentality.

# Effects from the Contractual Separation

*“A triangle of hate.”*

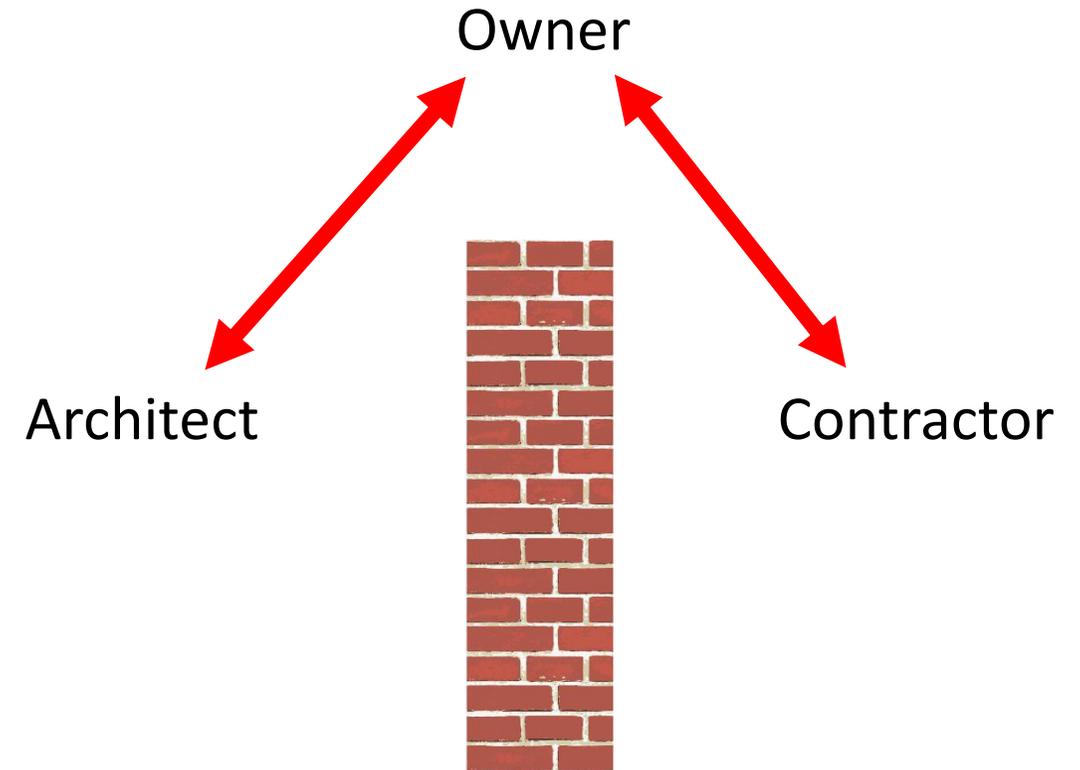
*“Contractor is against designer, designer against owner, contractor against owner, and everyone against everyone... That leaves nobody out.”*

*“There is risk shifting instead of risk management.”*



# Effects from the Contractual Separation

*“Knowledge silos, meaning the borders, walls between different parties.”*

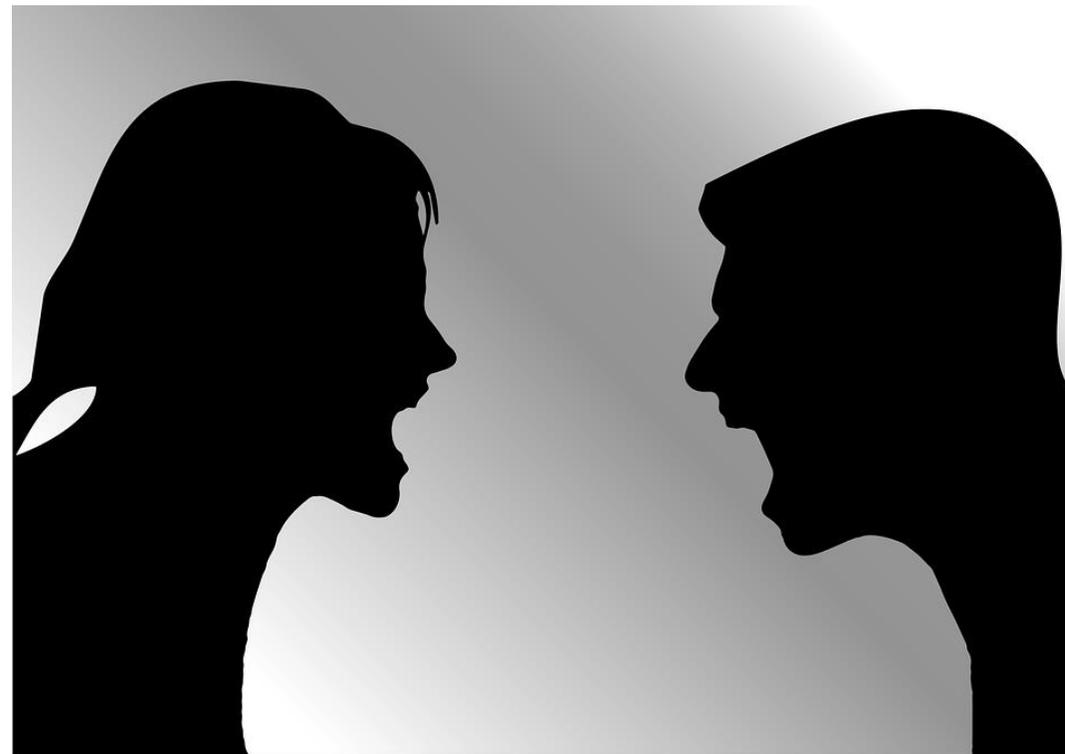


## Effects from the Contractual Separation

*“Aggressive,” “not pleasant,”  
“untransparent,” “not supporting,”  
“not collaborative,” “confrontational,”  
“disrespectful,” “protective,” “not  
explicit.”*

*“Hide information” and “have hidden  
agenda.”*

*“Self-preservation.”*



## Effects from the Separation in Time

Poor buildability.

*“You do the minimum that's required ... and you protect yourself.”*



## Effects from the “Lowest Bid Wins” Mentality

*“People don't realize some of the problems that are created ... by the siloed system of DBB. So, that initial number might be really good. The final cost, the ultimate cost... is different.”*

Past record of the company and its qualifications are not considered.

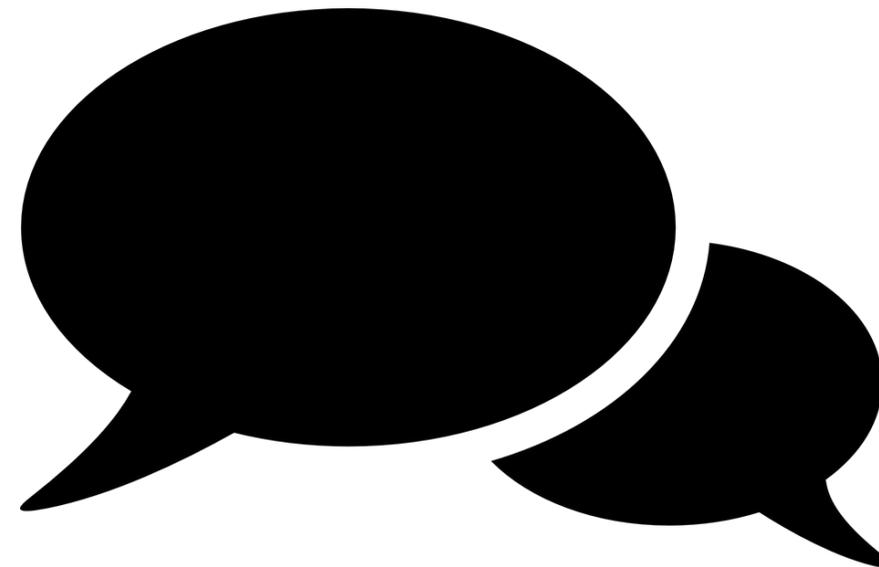
DBB is encouraging claim culture.

# How Can the Negative Effects of DBB Be Overcome?

- Building a lean culture in the projects.
- Using behavior and compatibility assessments before nominating companies for the project.
- Using “add-ons” to the traditional DBB contracts that allow engaging the contractors in the design process earlier:
  - Framework Alliance Contract (FAC-1);
  - Construction Manager at Risk (CMAR).

# How Does LPS Support Building a Lean Culture?

*“It makes people talk.”*



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## How Does LPS Support Building a Lean Culture?

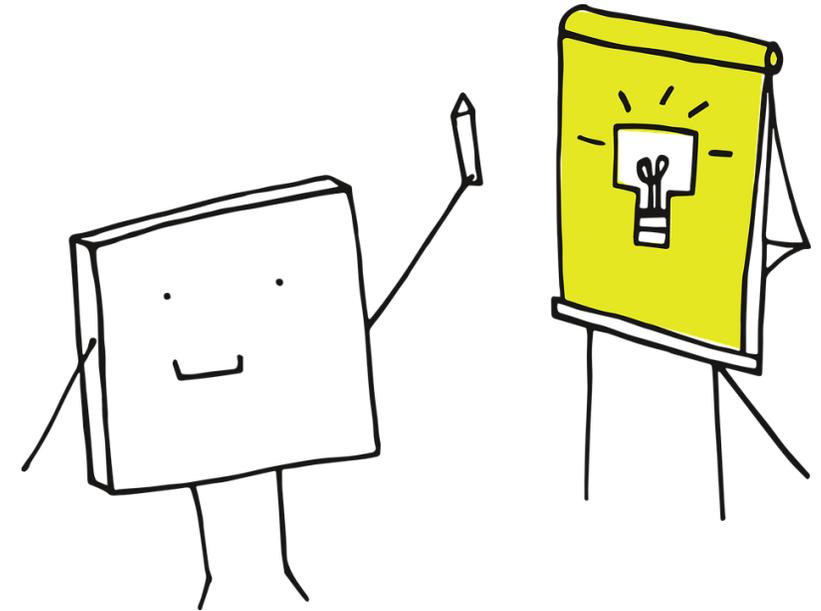
*“Being physically close to each other, sitting close to each other in the same office for some days a week, is the best solution.”*

*“It's easier to develop some sort of trust. When you see a person face-to-face, it is harder to make a promise you know you can't fulfil than when you give it on phone or by e-mail.”*



# How Does LPS Support Building a Lean Culture?

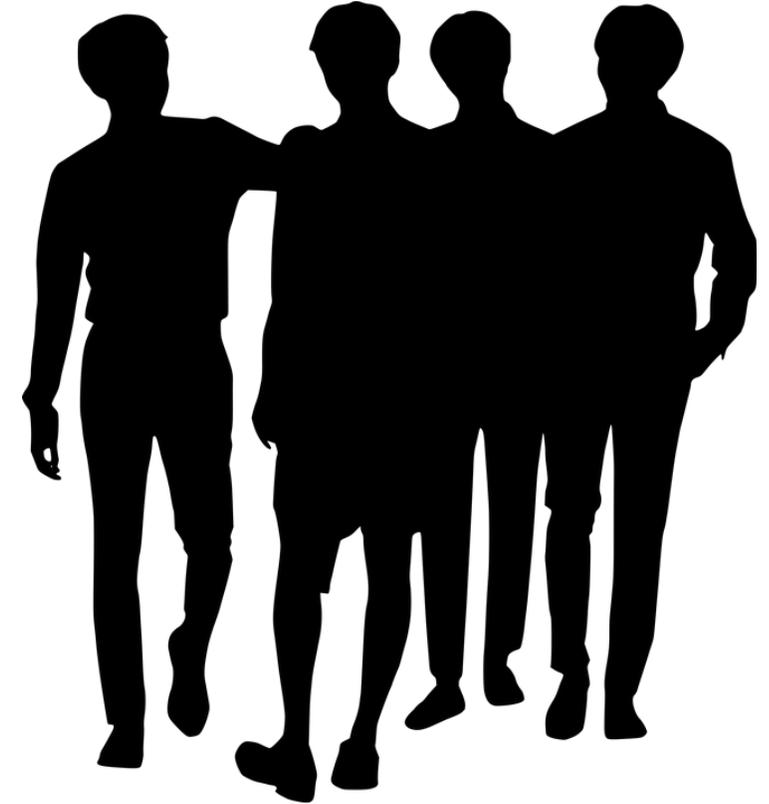
The design and construction processes are being visualized by LPS.



## How Does LPS Support Building a Lean Culture?

*“The team changes the complexity of the project. Our plan depends on the contractors and their capability, experience, labor availability.”*

*“It helps enhance ... your feeling of relationship, friendship, bonding. And it influences how you are interacting in another meeting, how you are interacting in the field. You start actually care about each other. All that soft things that we never bother to pay attention to in construction.”*



# How Does LPS Support Building a Lean Culture?

*“Open,” “transparent,” “motivating,”  
“positive,” “energetic.”*



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## Discussion

- Designers and contractors will be separated contractually.
  - LPS creates a forum where the common risks can be managed more efficiently.
- The designers will be separated from the contractors in time.
  - During the look-ahead process, the input needed from the designers can be structured.
- Qualifications of the companies involved in the project will not be insured.
  - LPS can help to reveal how a potential team will work together.

# Conclusion

- LPS creates prerequisites for an improvement of project environment.
- LPS is an enabler for creating a lean culture.
- If used with traditional mindset LPS can become a cargo cult.

**THANK YOU!**

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