Autodesk University Round Table Summary

SESSION TITLE	A Roundtable Discussion: Collaboration between Design and Simulation
SESSION ID	SM2195-R
SPEAKER	Tyler Henderson
COMPANY	Autodesk, Inc.

MAIN DISCUSSION POINTS

- What processes are commonly used when different people work on the design of a product than those who simulate/validate the design?
- What are the difficulties with these processes?
- What are the benefits?
- What is the ideal scenario when it comes to designing and simulating a product and collaboration between the various roles of a design team?
- Review of Autodesk A360 and the integration of Fusion 360 and Sim 360.

KEY TAKE-AWAYS

- The process of communication, data sharing, and collaborating between Designers, Engineers, and Simulation Specialists varies per company.
- The most common process is to have the Designer/Engineer pass of the design to a Simulation Expert, and then the Simulation Expert returns the design explaining how/why the design won't work. The Designer/Engineer then revises the design and the process is repeated until the design passes.
- Typically the Design artifacts (CAD Model) are independent of the Simulation artifacts (Results, Report, etc.)
- Designers and Engineers aren't expected to interpret Simulation Results. It is up to the Simulation Expert to communicate the Results back to the Designer/Engineer. But the simulation results can directly affect the design.
- The ideal scenario was identified as having the Designer/Engineer also be a Simulation Expert so the design and simulation can be done by the same person. However, this seems to be impractical.

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- A more practical solution is to have the Designer/Engineer conduct simple, preliminary analyses to affect the design and get it closer to a "passing" state before sending it to the Simulation Expert for more comprehensive analysis. This would reduce the number of iterations needed.
- Companies in Japan are trying to have their Simulation Experts create simulation templates for the Designers/Engineers so they can conduct the simulations without having to be an expert. The Sim Expert is still needed to create and maintain the templates, but it allows for more simulations to be conducted and the Sim Expert does not become a bottleneck for design approvals.
- Autodesk A360 Pro coupled with Fusion 360 and Sim 360 appeared to be a desirable solution to the difficulties identified when Designers/Engineers need to collaborate with Simulation Experts. It was also identified as a nice solution for Data Management.
- Autodesk A360 Pro could have broader acceptance if it could be deployed within a company's firewall.
- Participants identified a Catch 22 in that smaller, more agile companies are more likely to adopt a tool that manages data in the Cloud, but larger companies are typically the ones who dictate which tools their suppliers and contractors use (the smaller, more agile companies).

SUGGESTED FOLLOW-UP

- Participants should download and try the Trial versions of Fusion 360 and Sim 360 (includes integrated use of A360 Pro): http://www.autodesk.com/360-cloud
- Provide feedback through the online forums that can be accessed from with the A360 Dashboard.
- Please feel free to email me if you have any questions or want to engage in additional discussions: tyler.henderson@autodesk.com