

Case Study

The Boeing Company

The 737 airplane is a legend. The famous twin-engine design commands 40% of worldwide commercial jet sales. Its builder, Boeing, is a market leader.

The struggles of the mature commercial airline industry are equally well known: massive infrastructure, cutthroat competition, and an uphill struggle since 9/11. But when an earthquake destroyed a major building at Boeing's manufacturing site in Renton, Washington, the company was able to turn a potential tragedy into a transformation of the very way they build airplanes, and a continuing success story.

"There was always a huge gap between the people who design the product and those who build it on the factory floor," says Carolyn Corvi, VP/GM of Airplane Production. It was time to get design and manufacturing together. Boeing turned to the team of Steelcase, Seattle-based A&D firm NBBJ, and Steelcase dealer Barclay Dean.

UA trial site — a 45-person engineering team moved into the plant for 90 days — tested workplace tools and processes, and began to reinvent the Boeing culture. A manager in the group says "People (learned) they didn't need to do things the same way anymore... everyone began thinking about how their work flowed to and from others. It broke down barriers."

The pilot space was a turning point: most of the 45 employees, who originally considered their distant, white collar offices a badge of distinction, didn't want to move into the plant. But by the end of the test, they didn't want to leave.

Product solutions included:

- Open plan workspaces and common areas created with Answer, Pathways Technology Wall and Post and Beam
- Communal cafes with mini-libraries, PolyVision Impulse LTX and Whiteboard systems and lounge seating
- A wide boardwalk joining the factory and offices for impromptu meetings and discussions, emblematic of a more unified work force



Space occupancy is down 40%. Engineering and manufacturing are now partners in the production process. "Using space and existing assets more efficiently," says John Naismith, Steelcase Consultant, "(helps) break down blue-collar and white-collar barriers that previously stood in the way of real collaboration. In that sense it allowed Boeing to make superior use of intellectual assets, too."

Thanks to Boeing's bold strategy of simultaneously implementing lean manufacturing techniques with a more effective work environment, productivity is up 50%. It used to take Boeing 24 days to build a 737. Now it takes just 12 days.

"It started out as an idea about a facilities change," Corvi recalls. "It quickly turned into an opportunity for all of our people to work together to continuously improve and trust one another to get the work done. "We have place to concentrate and public space for people to come together and collaborate. This is really about engagement. It's about the power of creating velocity in the ways we're working together."