

1 Problem

What When	Problem(s)	Airline flights are getting less comfortable
	Date	Ongoing
	Different, unusual, unique	Airline seats continue to shrink, average size of passengers growing
Where	Facility, site	Airports throughout world
	Unit, area, equipment	Most major airlines
	Task being performed	Air travel
Impact to the Goals	Customer Service	Increasing complaints about uncomfortable flights
		Airlines want return customers
	Economic	Airlines working to maximize per flight profit

THE SHRINKABLE SEAT? Cause Map

Can airline seats possibly be even smaller?

Comfort certainly hasn't been the top priority as airlines have shrunk seats to cram more passengers onboard, but a new patent application by Airbus really takes things to a whole new level. The design closely resembles a bicycle seat with a small back and is radically smaller than current airline seats.

"Many, if not most, of these concepts will never be developed, but in case the future of commercial aviation makes one of our patents relevant, our work is protected. Right now these patent filings are simply conceptual."

-Mary Anne Greczyn, Airbus spokeswoman

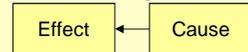
Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

CAUSE MAPPING

Problem Solving • Incident Investigation • Root Cause Analysis

- Step 1 Problem** - What's the Problem?
- Step 2 Analysis** - Why did it happen?
- Step 3 Solutions** - What will be done?

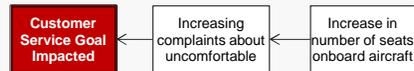
Why?



NOTE: Read the Cause Map from left to right with the phrase "Was Caused By" in place of each arrow.

2 Analysis

Basic Level Cause Map - Start with simple Why questions.

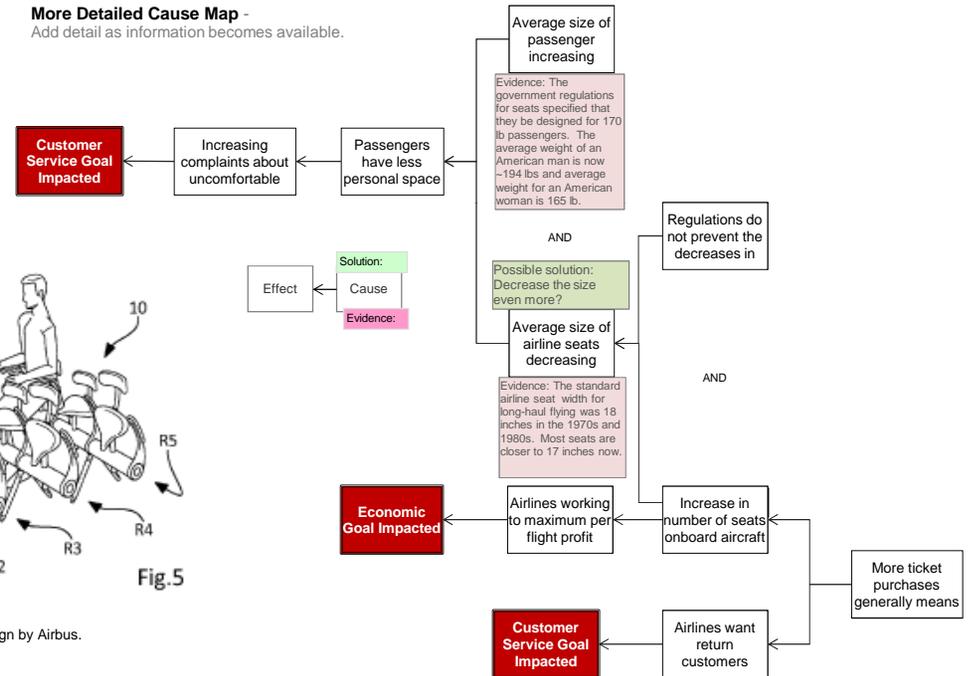


Basic Cause-and-Effect

The basic idea is that airlines would like to maximize profits and that putting more people on each flight allows more tickets to be sold resulting in more money made. The average airline seat width has already decreased to about 17 inches from the 18 inches typical for a long-haul airplane seat in the 1970s and 1980s. The proposed design would take this trend a step further and decrease seat size even more dramatically.

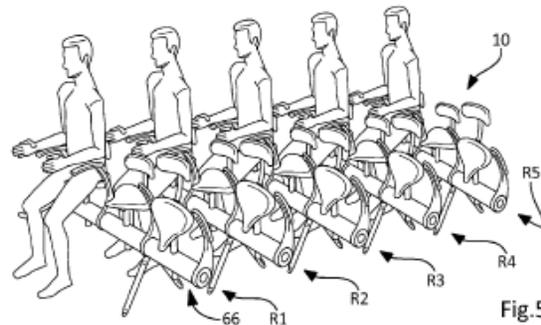
More Detailed Cause Map -

Add detail as information becomes available.



3 Solutions

The final step in the Cause Mapping process is to determine solutions to reduce the risk of a problem recurring. The new proposed design would likely increase per flight profits, if airlines could fill the seats. But based on the reaction in the media to the figures in the patent, the impact on customer service would be negative and potentially reduce the number of passengers overall. The seats would also have to demonstrate adequate safety prior to use, which may prove difficult.



From patent application for a new seat design by Airbus.

For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site.



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