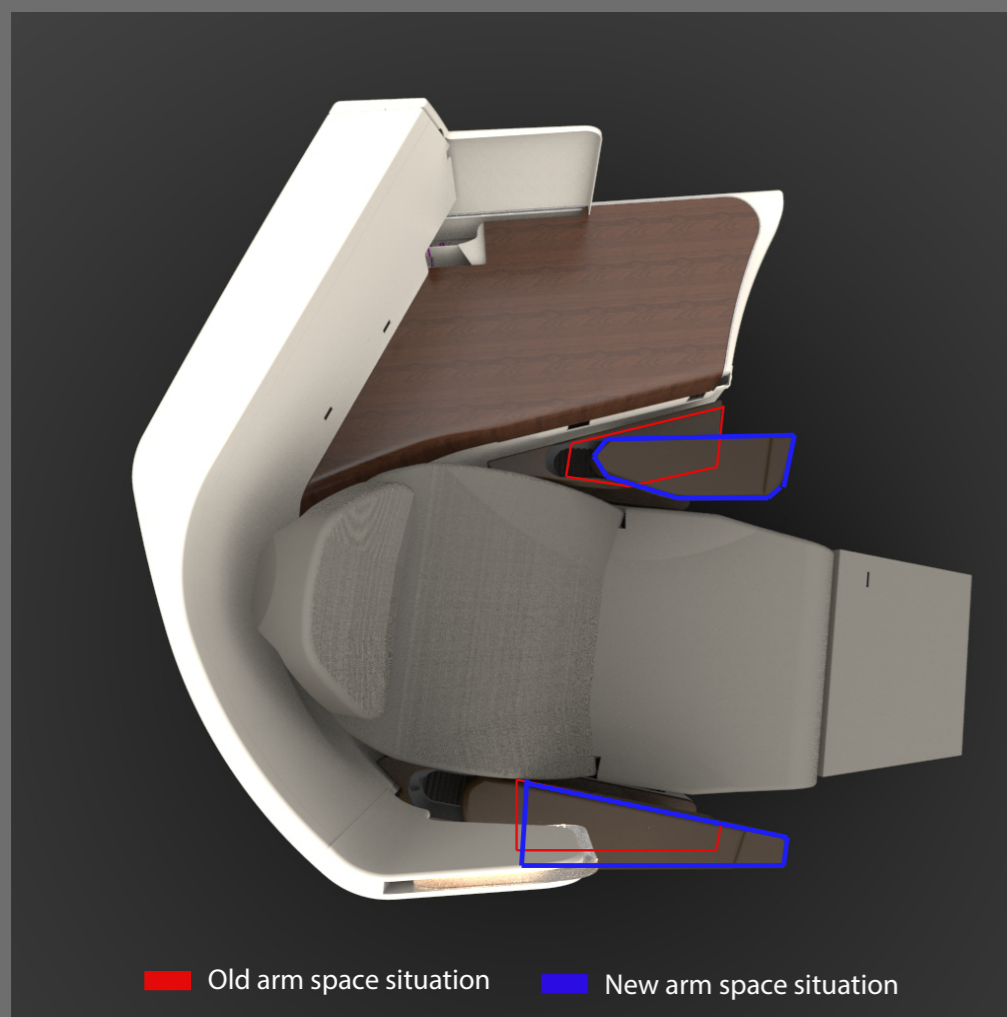# REDESIGN OF A BUSINESS CLASS ARMREST

Improvement of arm comfort for watching in flight entertainment and reading.

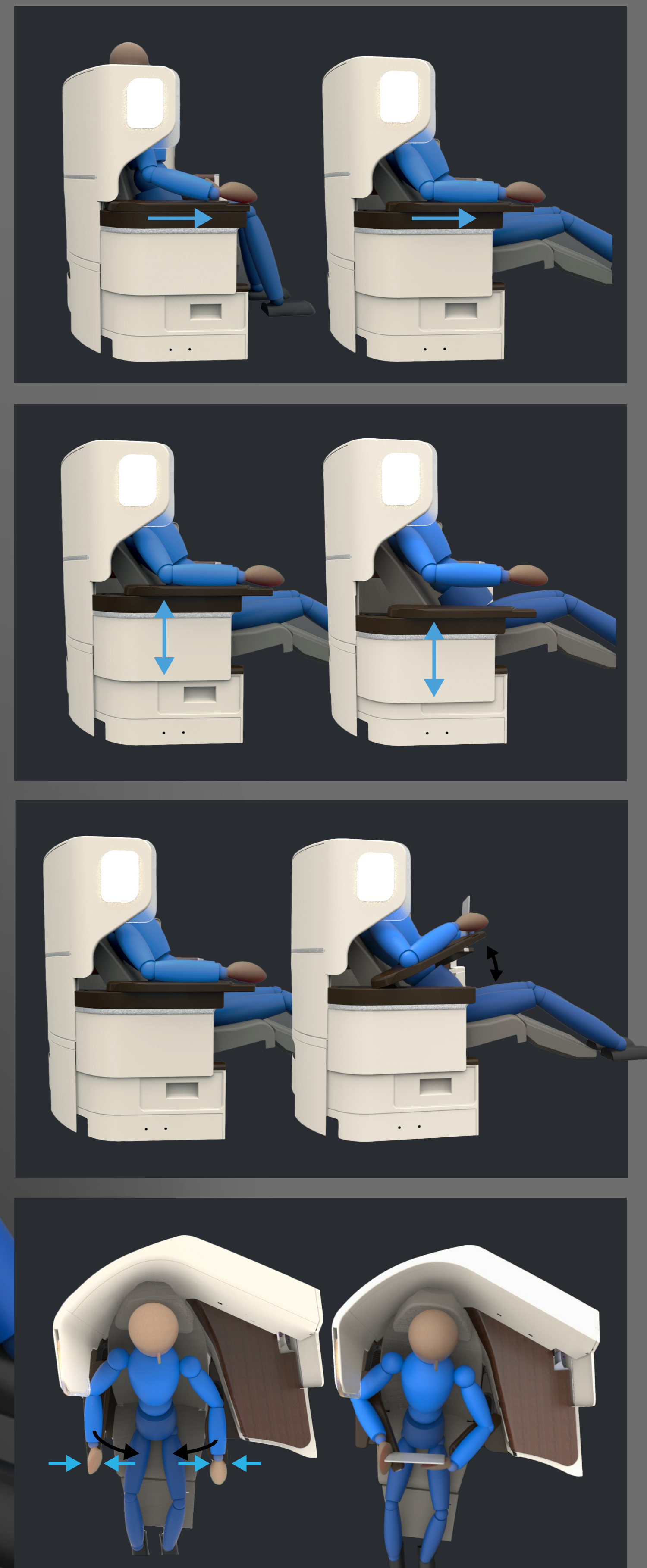

Old arm space situation   New arm space situation

The economy is in a lift, businesses allow their employees to fly business class more often. First class and business class only represent 10-15% of the total number of seats globally but is responsible for 50% of the revenue. This makes business class travel very relevant to major airliners. Seat comfort is a tool used by the airlines to differentiate themselves. Within a review of three business class seats, the participants were asked if there was something comfortable or uncomfortable about their sitting position. 30% of their answers mentioned shoulder, arm and hand comfort.

Together whit RECARO Aircraft Seating a new design was developed to improve the comfort of their current long-haul business class seat. The final proposed design is an armrest which can be integrated into the current RECARO long-haul business class seat. The top part of the armrest can automatically move forward together with the seat so the space available for arm support while watching IFE is optimized. Both armrests have the same adjustability options to improve the symmetry of the sitting position. the up/down movement of the armrest can also be adjusted automatically with the same control panel as the seat adjustments.

The reading position is improved by the added function of upwards rotation and inwards rotation. When the armrests are placed under an angle the reading device is brought closer to eye height while supporting the arms. Participants experienced the new design as more comfortable for reading than the current armrest positioning during a user test.

The following pictures shown the multiple adjustability options

RECARO

Gerbera Vledder
Redesign of a business class armrest
22 November 2017
Integrated Product Design

Committee

Company

Chair: Prof.Dr.P.Vink
Mentor: Ir.H.E.C.Crone
Company Mentor: C.Bich
RECARO Aircraft Seating

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