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Vortragstitel Outsourcing Decisions and Product Characteristics regarding Commercial

Aircraft Integrators

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Abstract The pioneering of the concept of outsourcing in the aircraft manufacturing

industry was Embraer, followed by Bombardier Aerospace. Recently, Airbus and Boeing adapted this particular production strategy as well. The outcome of these companies' outsourcing decisions differs to a wide extent, from being very successful to having incurred severe delays and losses of product quality. This

paper uses insights from these four case studies as well as theoretical

considerations from management theory and institutional economics to analyze the different benefits and problems that arise from outsourcing. According to the latter theory, potential problems are incurred due to insufficient alignment of organizational, technical and process-related procedures. Combining the

organizational, technical and process-related procedures. Combining the theoretical and empirical analysis, a framework is developed that specifies several categories including number of competitors or level of complexity against which various aircraft component categories are rated in regard to their outsourcing-specific criticality. It helps to depict those areas that are less critical when it comes to outsourcing as well as those areas which exhibit high complexity and specificity, and are thus rather ineligible for external production. The analysis shows that the focus and degree of outsourcing in regard to the different aircraft integrators differed, and secondly, the necessary thorough alignment of expectations and standards failed in several instances. A major recommendation of the presented analysis is that airframe systems and integrated utility systems are critical components in aircraft integration. They should be part of the Original Equipment Manufacturers' (OEM) core business and are not suited as being entrusted to

external risk-sharing partners.