Cognitive products integrate cognitive functionalities such as perceiving the environment, learning and reasoning from knowledge models that are created through the combination of a mechatronic system and advanced software algorithms. While the area of cognitive products is still in its infancy, we regard the safe and reliable performance fulfillment as one of the challenging tasks for the research community to develop cognitive products that meet customer expectations. This paper presents how failure analysis can be integrated in the functional modeling process of cognitive products to increase their safety. For this purpose, we explore if current state failure analysis methods are appropriate for analyzing cognitive products and where their weaknesses and strengths are. The cognitive coffee waiter is used as an illustrative example to concretely show the limitations of these methods.

**Stichworte:**
- cognitive products
- Function modeling
- failure analysis

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Occurences:
· Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Mechatronik > Lehrstuhl für Produktentwicklung (Prof. Volk komm.) > Konferenzbeiträge
· Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Mechatronik > Lehrstuhl für Produktentwicklung, Konstruktionssystematik und Leichtbau (Prof. Zimmermann) > Konferenzbeiträge

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