

The Smart Door: An Example of System Engineering in Building Industry

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Abstract Systems Engineering is now becoming mandatory to master complexity but also to develop innovative systems. Application of Systems Engineering requires the use of a methodology upon tool set. This paper is about the application of a Systems Engineering methodology from CESAMES on a small but complex system: an automatic sliding door in a building. We all experienced it: automatic doors have tendency to open inadvertently for example when pedestrian just walks by with no intention to enter the room. This is due to an old technological design: easiest way to decide to open the door is to detect a person in a trigger zone. With a system approach, the door could be nicely improved with great potential developments. This document explains how, and the method used to do it.

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