



### Lena Johansson

*Global Expert Requirements Management  
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Place of Birth: Varberg, Sweden  
Current Residence: Limhamn, Sweden

Domain: Food processing and packaging  
Years in systems engineering: 4  
Year joined INCOSE: 2015  
Role in INCOSE: Tetra Pak Representative, Corporate Advisory Board

**“Trying to explain systems engineering ... to an audience outside of the systems engineering community ... forces you to focus on what is really the core within systems engineering.”**

#### **What has been your most fun/challenging systems engineering project?**

I have an expert role within systems engineering, specializing in requirements management. The most fun and challenging project was when our team developed an internal training called “Systems Engineering for Non-Systems Engineers.” Trying to explain systems engineering, its benefits and how it is performed, to an audience outside of the systems engineering community is truly challenging and forces you to focus on what is really the core within systems engineering.

#### **If you could work as a systems engineer in a different industry, what would it be? Why?**

I would work in the healthcare or medical device industry, since it would be an opportunity to contribute to the wellbeing of others.

#### **You’ve spoken about agile methods in mechanical product development and its implications for systems engineering. Please summarize?**

I presented findings from a pilot project that applies an agile method called “Scrum” in our traditional stage-gate product development process. We’ve seen two main benefits thus far: increased work efficiency and improved employee motivation. Here, the role of the systems engineer is different due to the iterative and incremental way of working. We focus more on risk analysis using Failure Modes and Effects Analysis (FMEA), requirements prioritization, and verification and validation planning as we try to verify our systems as early as possible.

#### **Where do you see INCOSE and systems engineering going in the next 25 years?**

I expect systems in general to become more complex and more software intense. As a consequence, I think systems engineers will need to utilize model-based systems engineering, view software as a competitive advantage and apply methodologies for agile development.

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