Abstract:
As part of a wider improvement initiative across all parts of our value chain, Danfoss, in 2007, launched an initiative to significantly improve its product development processes. The goal was to make radical improvements on the dimensions of: value to customer, time to profit, unit cost and quality. In order to do this, we looked around to identify industry-wide accepted best practices to build on. When starting a similar program in production 4 years earlier, there were clear accepted practices that had proved themselves in multiple companies and industry sectors. These are centred on the manufacturing philosophy of Toyota and generally grouped under the term "lean production". These would often be merged with another set of practices termed "six sigma", that came out of Motorola and championed by GE.

In product development we found a different picture. Although many schools of thought have been adopted by industries, often trying to build on the back of lean production ideas (termed unsurprisingly "Lean product development"), these were found to be relatively immature in their application and narrow in what dimensions they improved when applied. Many proponents backed different tools and methods out of these schools as the "best" best practice, but non appeared to have a track record of significant impact on the multiple dimensions we needed, to justify their claims.

We undertook a significant exercise to look at the internal processes we wanted to improve. We then separated the tools and methods from the different schools of thought to identify which tools and methods were relevant to our processes and had a track record of success along at least one dimension. This led us to identify an underlying empirical set of principles that really seemed to drive true impact along all the dimensions we were looking for. Once we had these, we were able to go back and pick and choose a variety tools and methods from the different schools of thought, that embodied one or more of these principles - stealing with pride. This gave us a set of tools that when used together would create the impact we were looking for. Finally we then created a system to adapt, improve and test these tools and methods before spreading them out, so that our people engaged in product development find them relevant, workable, and able to quickly deliver visible and significant improvement to their product development.

The talk will outline some of these principles and methods we have built up in this journey.