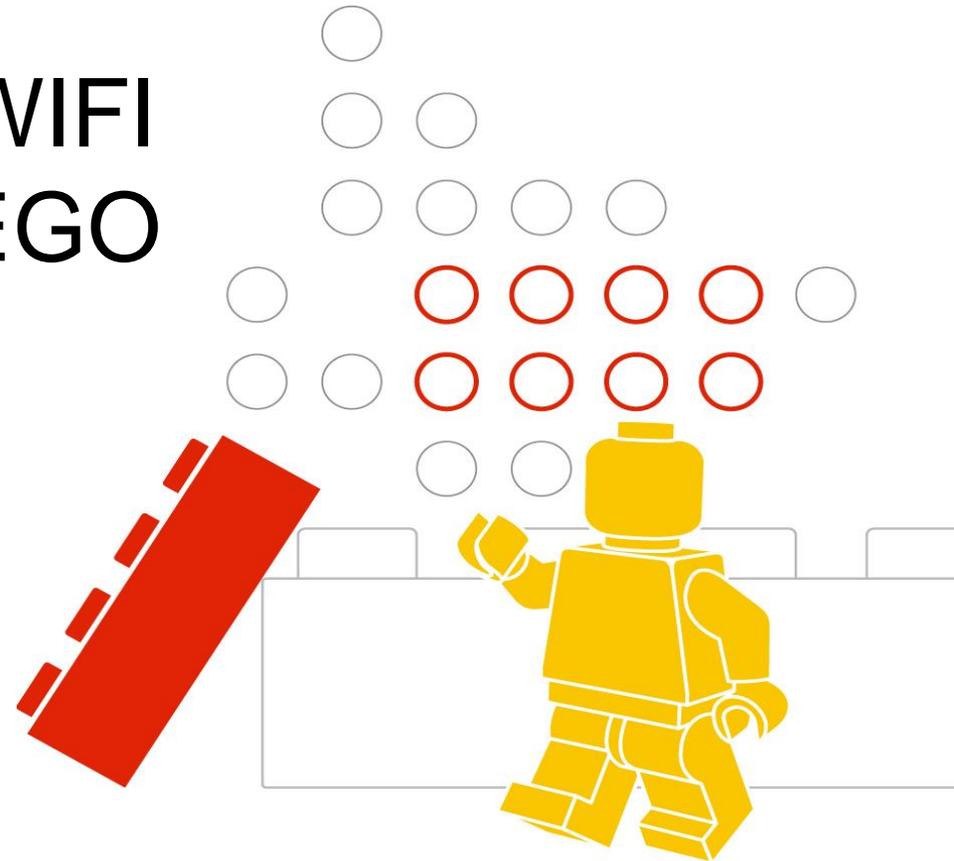




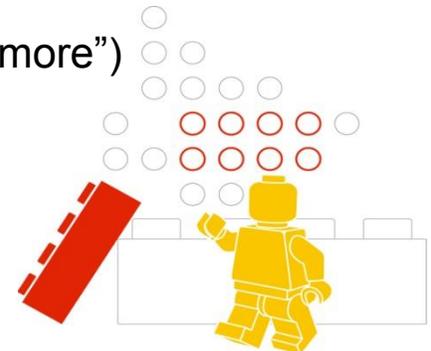
Pilot of implementing WIFI tags on asset in the LEGO group.

By: Torben U. Petersen



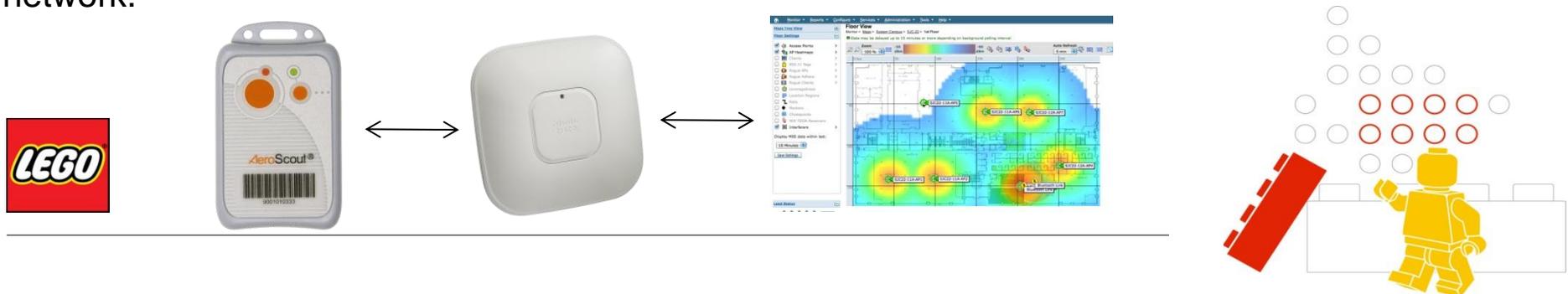
Why did we start looking in this direction?

- Global asset counting 2 times every year by barcode scanning. (App. 48.000 numbers of equipment counted last year, on 4 sites) - takes a huge amount of working hours.
- Huge amount of “missing” equipment after each counting. (EQ has been moved during counting, missing barcodes, scrapping without updating the system ect. ect.)
- Possibility to make faster and better changeover without missing any flex EQ. (Grinders, pickers, robots ect.)
- Better use of flex Equipment. (Optimizing of cleaning, maintenance ect.)
- Semi-automatic creation of (SAP) maintenance order including EQ position at brakedown.
- Optimized planning process based on position. (faster from A to B)
- Alarm if Tag has not been “seen” during 1 or 2 days. (no lost “barcodes anymore”)



Reasons why to choose WIFI-tags insted of normal RFID-tags?

- It was not possible/very difficult to use passive tags because of the amount of metal in the production. (Moulding machines ect.)
- To be able to run "live tracking" on asset, a big investment need to be done in infrastructure. (antennas, whirring ect.) And this needed to be done globally.
- Our existing WIFI infrastructure is already fully implemented and up running on all LEGO sites. – based on Cisco setup.
- The backend software is a standard Cisco plug-in (MSE). – This should make it quite easy for our IT-C to handle.
- The MSE plug-in will give out network department some advantage for optimizing the existing network setup – a new infrastructure could on the other hand decrease the performance of the network.



Why is it not up running in live environment yet?

We did attach the MSE plug-in to a narrow arrear in LEGO Billund.

Result? : All hand-terminals in that arrear lost connection to the network.

It turned out that all hand-terminals had a function turned on to optimize the connection to accespoints when they are “on the move”.

This function needs to be turned off before connecting the MSE to the network.

(Globally app. 600 terminals, running different systems)

This software update needs deep testing before doing this.

So..

The system is running as test in a closed environment until a safe and approved test has been finished.



Questions?

