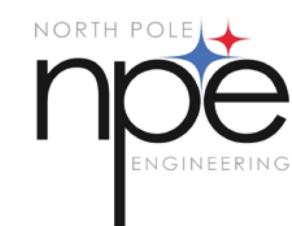
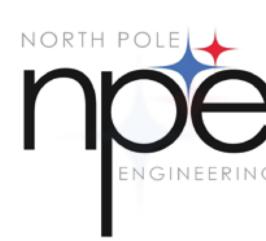


Do they go together?



## About NPE

- Established in 1997 & based in Minneapolis, MN
- We have built our business around helping our customers connect "things" to solve problems and overcome challenges
  - We do this through our connectivity products and engineering services



# Does ANT fit - How do we answer that question?

What challenges are we facing/what problems are we trying to solve?

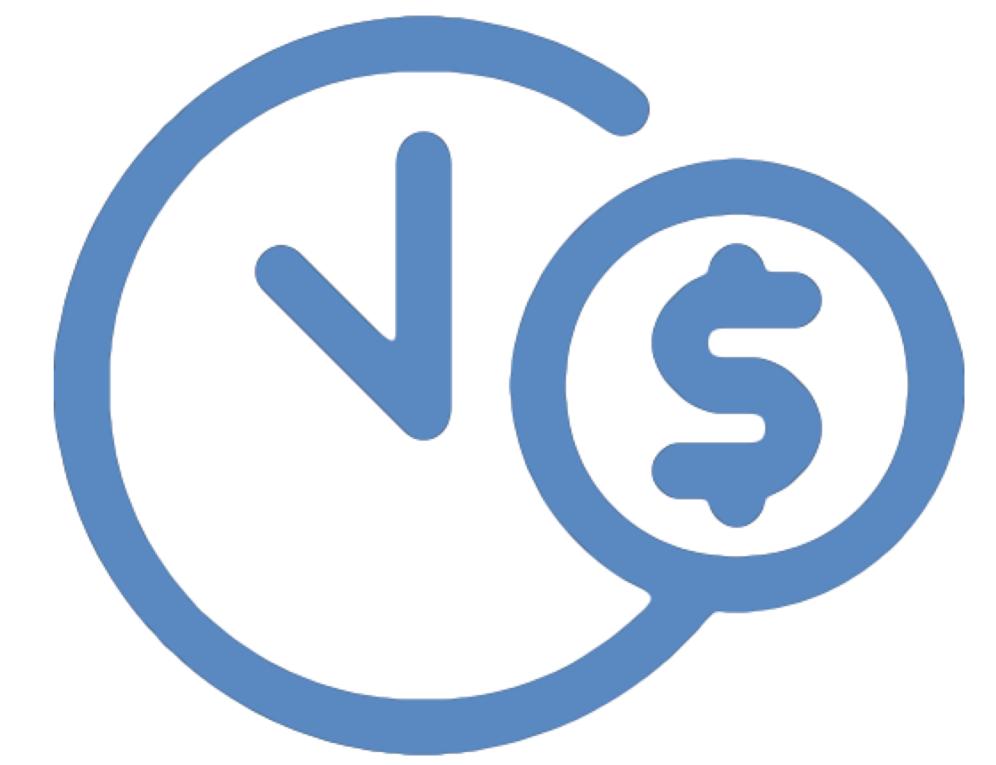
What "things" would we need to connect to these solve problems and overcome our business challenges?

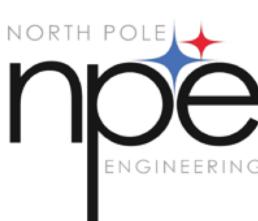
What value is derived from connecting "things" for our business?



#### Value Creation

- Efficiency improvements
- Revenue integrity
- Enter new markets
- Grow existing market share
- Lower product costs
- Create new revenue streams





## Does ANT fit - What constraints are there in connecting our "things"?

Power?

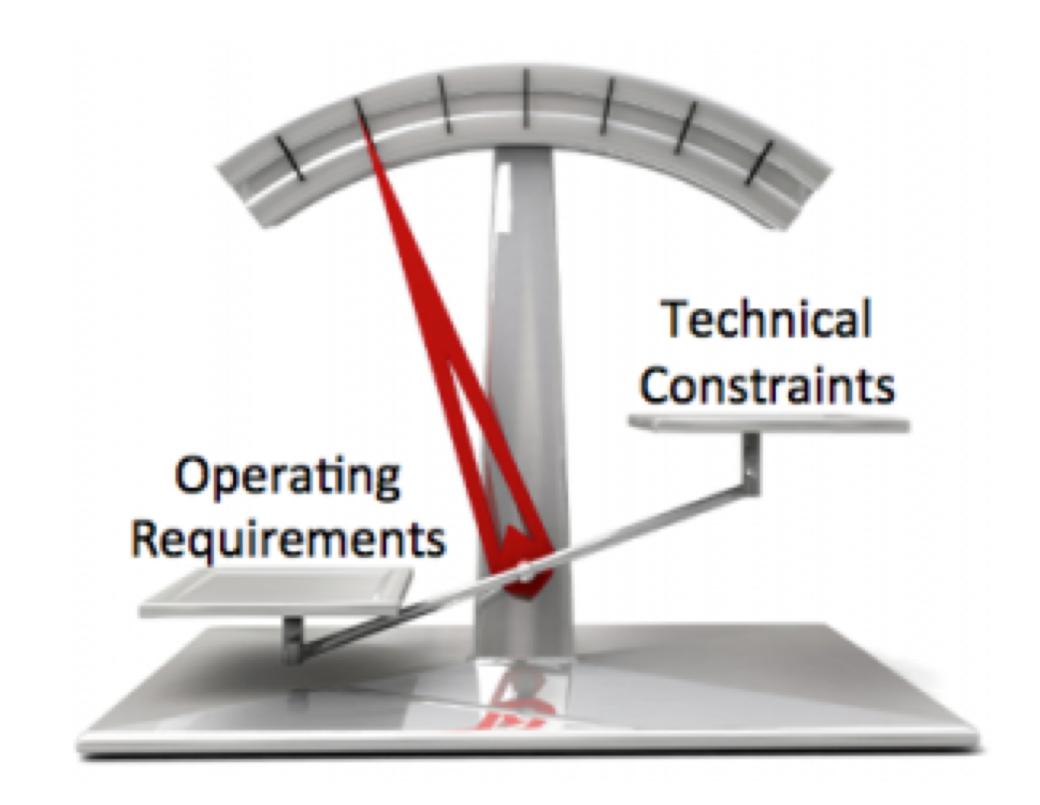
Physical?

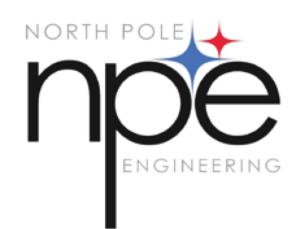
Environmental?

How much data, how often?

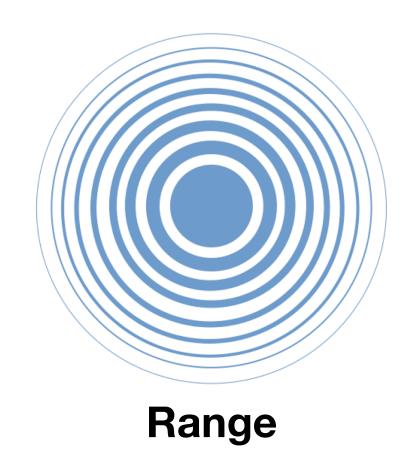
Where does data need to go?

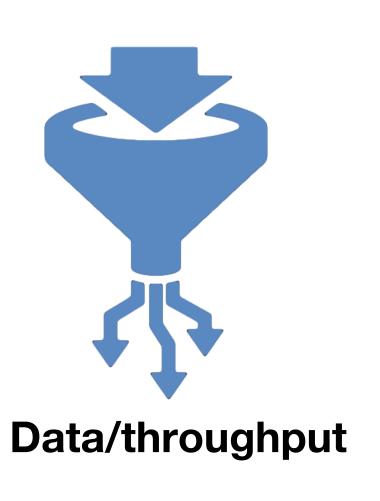
Cost?





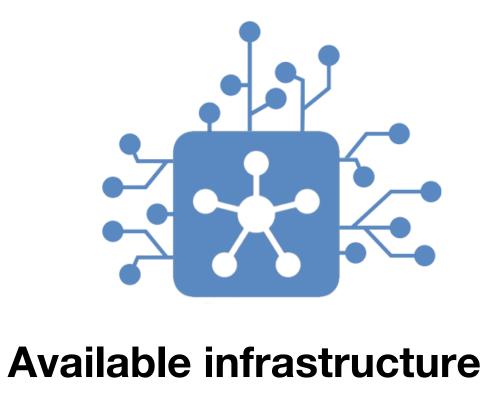
#### What are the connectivity constraints?



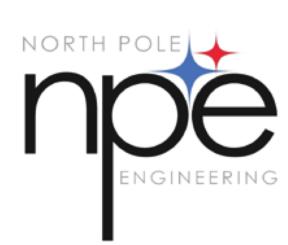




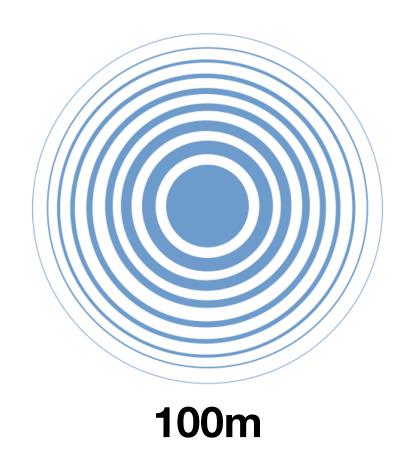


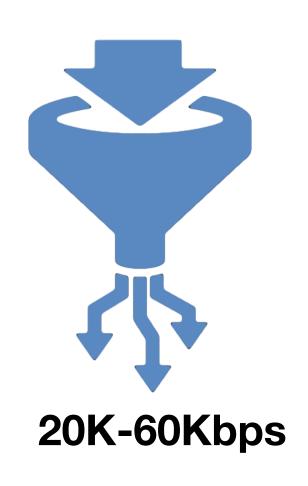




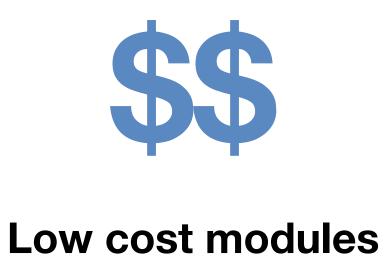


#### ANT Characteristics

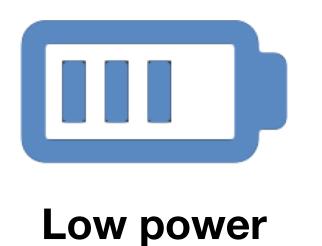


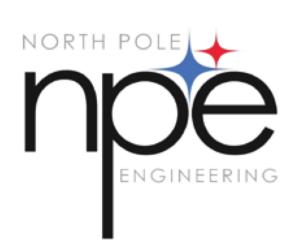








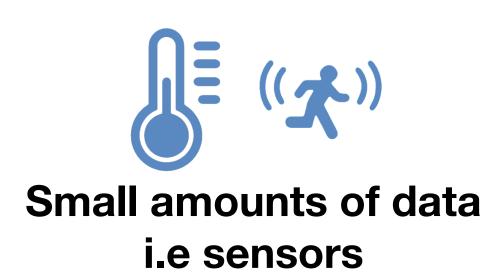


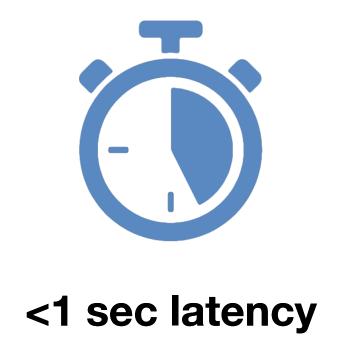


## What makes ANT good for loT?



Range <100m





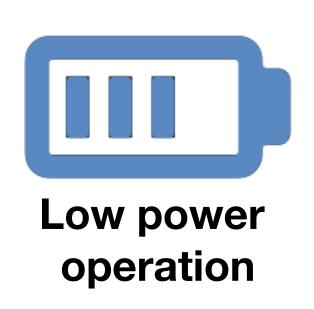


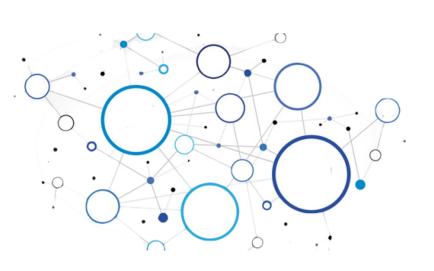


Combined protocol solutions

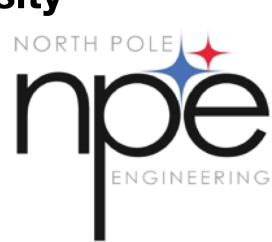








**Device Density** 



#### Combined protocol device example

Bluetooth

Mobile device connectivity

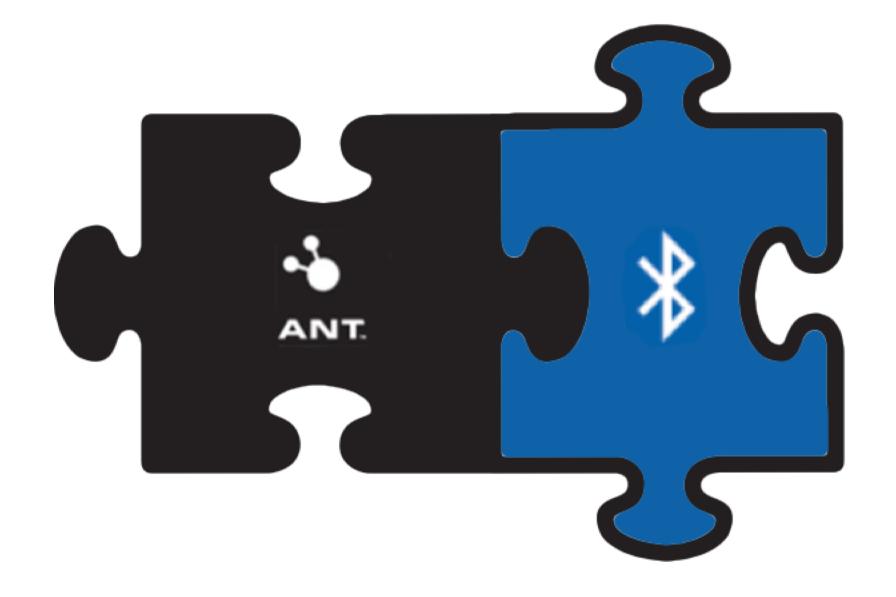
Firmware updates

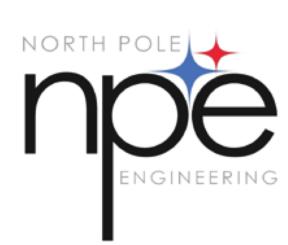
Device commissioning

ANT

Sensor measurement data

Event/alarm data





## Example Applications

Sports and Fitness

Group fitness

Asset management

Commercial

Refrigeration monitoring

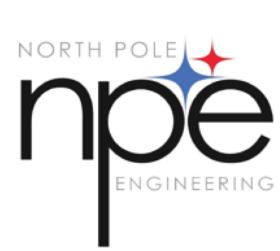
Process monitoring

Asset tracking

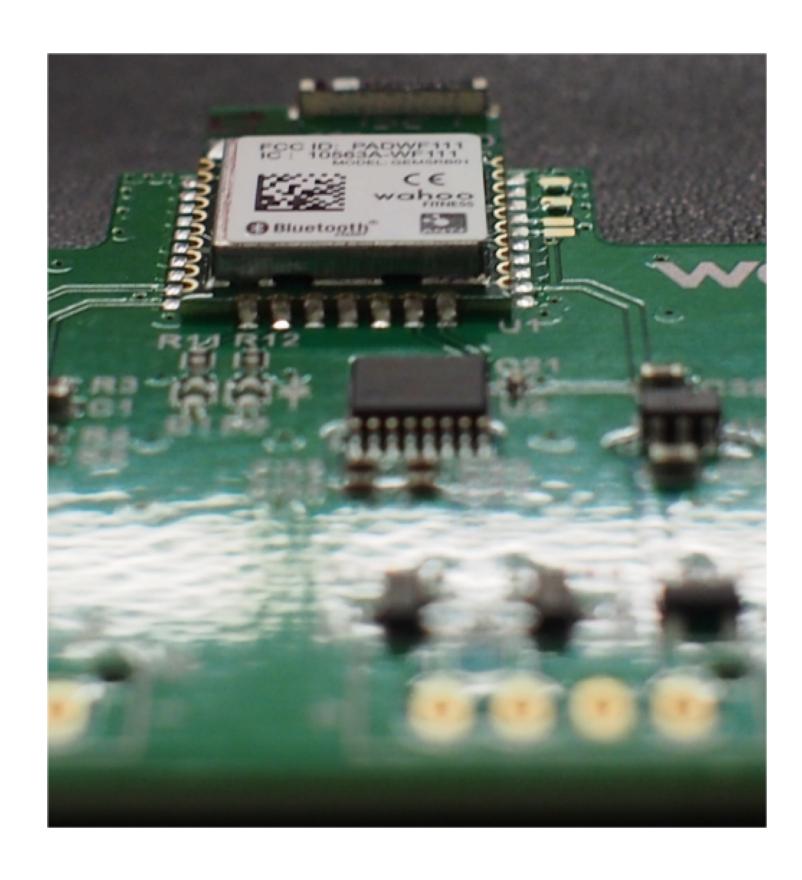
Health care

Patient location monitoring





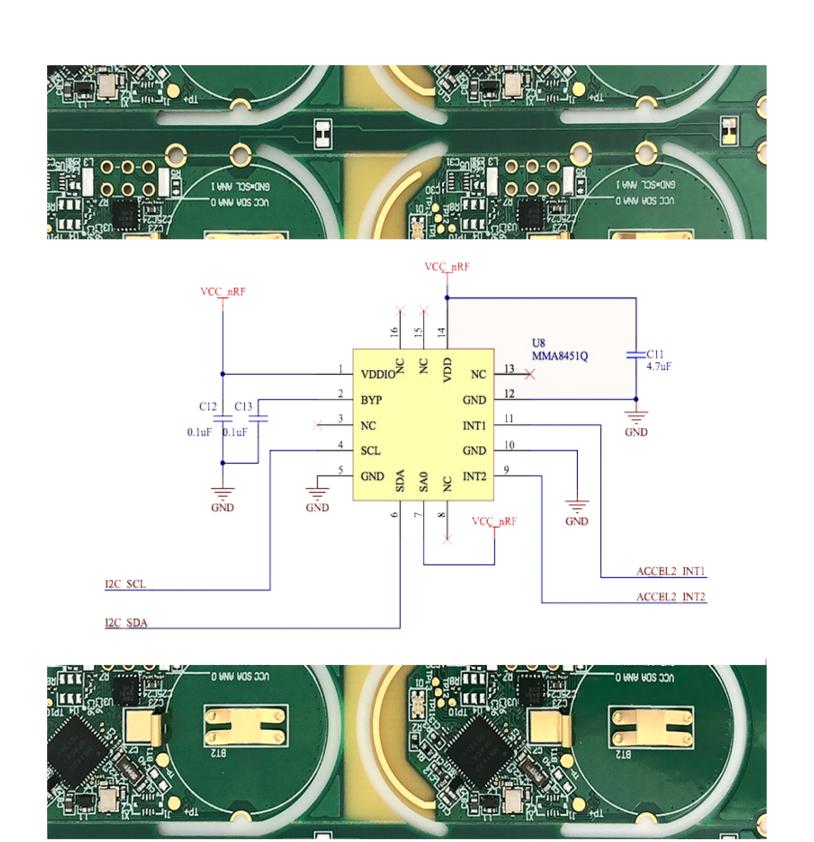
#### IoT Solutions



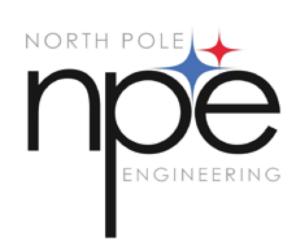
**OEM Modules** 

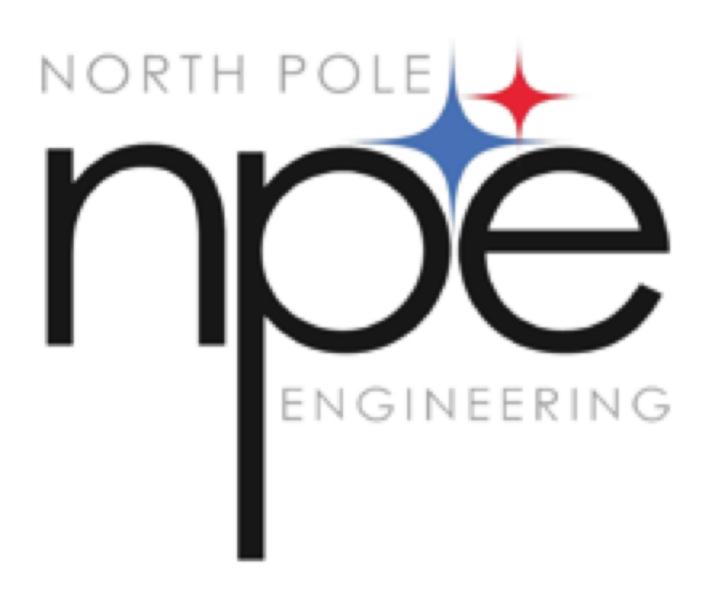


**WASP Gateway** 



**Engineering Services** 





## Thank you!

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