Machine break-downs cost fortunes because your whole business depends on them. Here the escalatory cost of a break-down far outweighs the cost of the machine repair. With constant monitoring of critical machines, you can:

a) perform Predictive Maintenance avoiding unexpected breakdowns & periodic maintenance.

b) get Real-Time visibility of their performance which is crucial for the optimal scheduling of the factory assets.

So far, the predictive maintenance is not a reality. There is enough algorithmic intelligence but not enough data to feed. For collecting the data, machines need to be instrumented with sensors, which is a daunting task due to the hassles of wiring & packaging. CogniSense™ lets you monitor machines using RF signal non-invasively.

Benefits of CogniSense:

- Easy Deployment: Non-Invasive monitoring even through obstacles like a wall
- Harsh Environments: works where you can’t install other sensors
- Cost-Effective: One device can monitor many machines
- More Information: provides a signature representing the wholistic health of the machine
Machine Health Signature
Tells everything about the machine

CogniSense™ generates a wholistic signature about the health of the machine based on how it interacts with an RF signal.

Our underpinning insight is that any physical movement imprints its footprint on an RF signal provided the object’s material is sensitive enough to the subjected signal frequency.

CogniSense™ captures the movements of the internal parts of a machine using radio signals, which reflects the mechanical integrity of a machine.

CogniSense™ signature tells the rotational frequencies of all the components with cent percent accuracy (see fig).

Apart from that, it encapsulates a lot more information about the machine health, which could be used by the AI algorithms for predictive maintenance.

CogniSense™ is a unique and promising technology currently in development at TRL-4 at ThinkClock Innovation Labs, UK. (Ref. Patent WO2018007790 A1)

We are looking for industry partners for the early adoption of this technology. If you are interested, please contact us at bdc@thinkclock.com. For more information, please visit www.thinkclock.com or call us at +44 (0)7517581192 ; +44 (0)7714051202