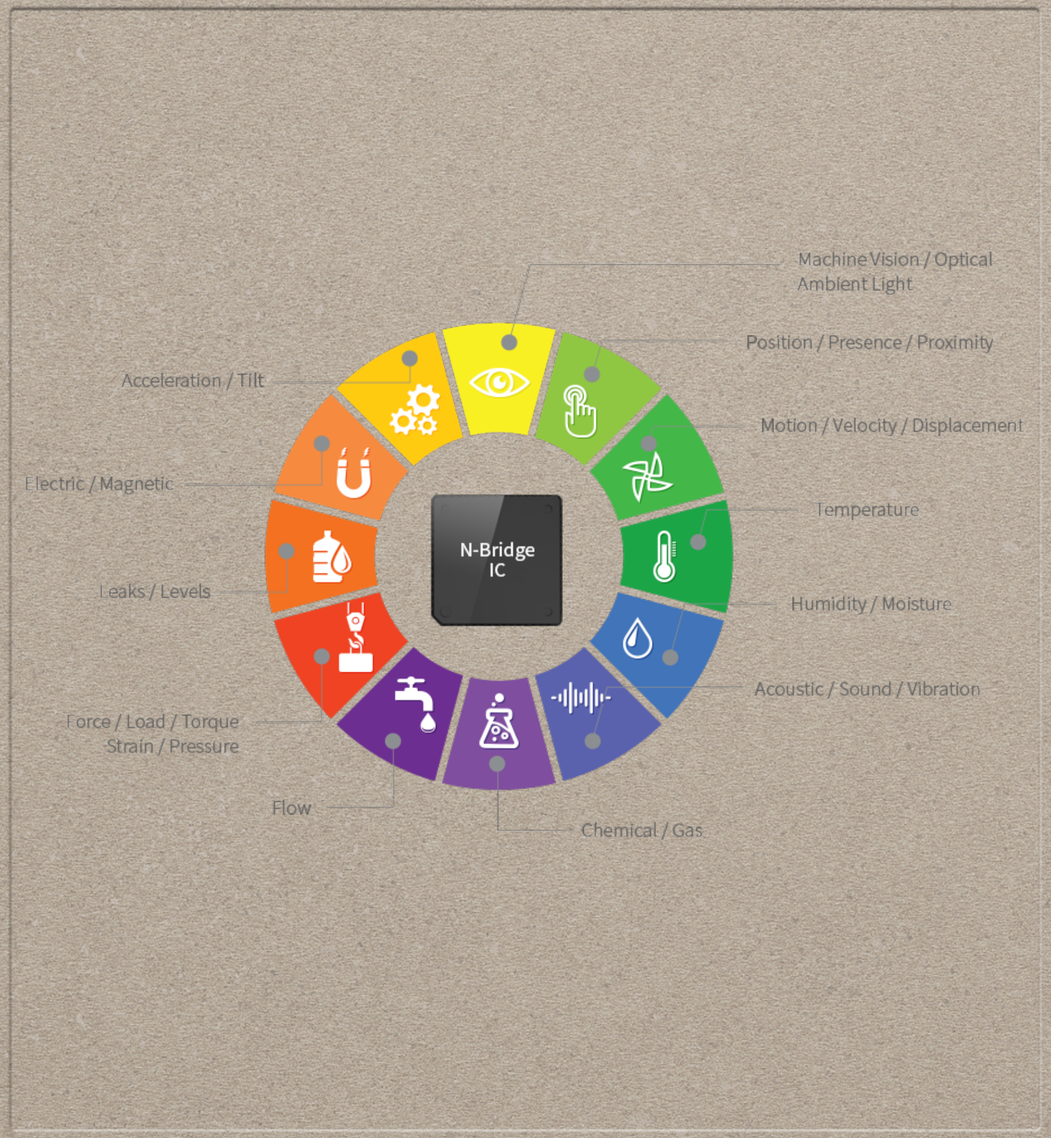
LEARNINGS FROM OPO & SYNTHETIC SENSORS

SENSING!!

MULTIMODAL SENSING

WHAT DO YOU IMAGINE WHEN I SAY SENSING?



IMG SRC: http://www.3alogics.com/img_up/shop_pds/threealogics/design/img/img_iot03_1.png

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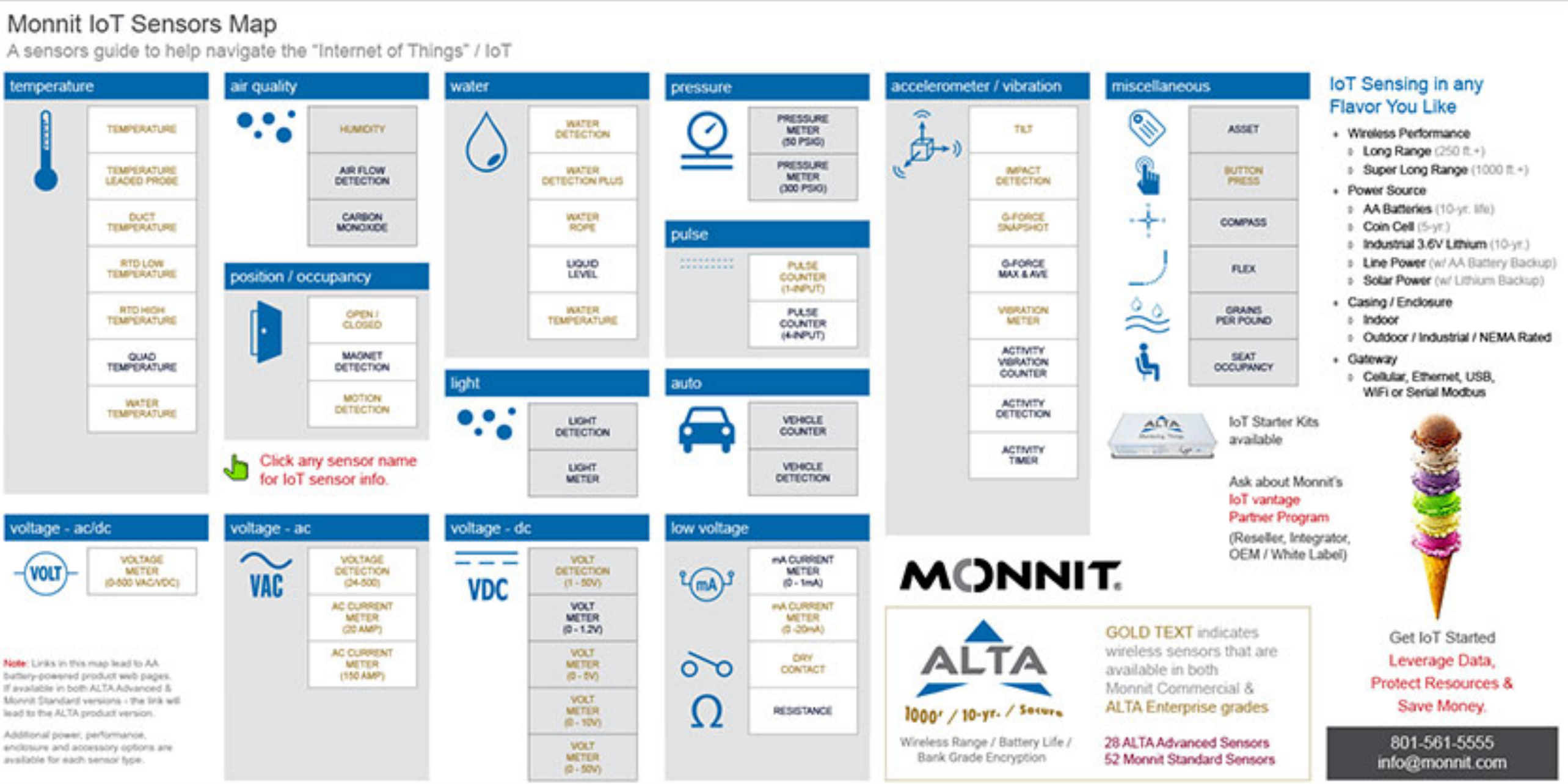

IMG SRC: https://monnit.azureedge.net/content/documents/infographic/Monnit-IoT-Sensors-Map.jpg

ADVANTAGES AND DISADVANTAGES OF MULTIMODAL SENSING

OPO: A WEARABLE SENSOR FOR CAPTURING HIGH-FIDELITY FACE-TO-FACE INTERACTIONS

- Captures Face to Face interactions (suggested in title)
- Is it a hack? Is it absolutely needed? It is multimodal approach!!
- Parameters for localization and distance estimation, Eg. RSSI, ToA, AoA, TDoA, etc.

OS CONCEPTS DEALT WITH OPS

- Over TinyOS.
- Must deal with broadcast.
- Communication and Collision
- Discovery and Synchronization.
- Always-On (Low power mode).

EXPERIMENTS AND ANALYSIS

SYNTHETIC SENSORS

MACHINE LEARNING AND THE CLOUD

MULTIPLE ORDER SYNTHETIC SENSORS?

OS IMPLICATIONS??

IS IT TRUE PLUG AND PLAY?

REDISCOVER MULTIMODAL SENSING?

THANK YOU!!