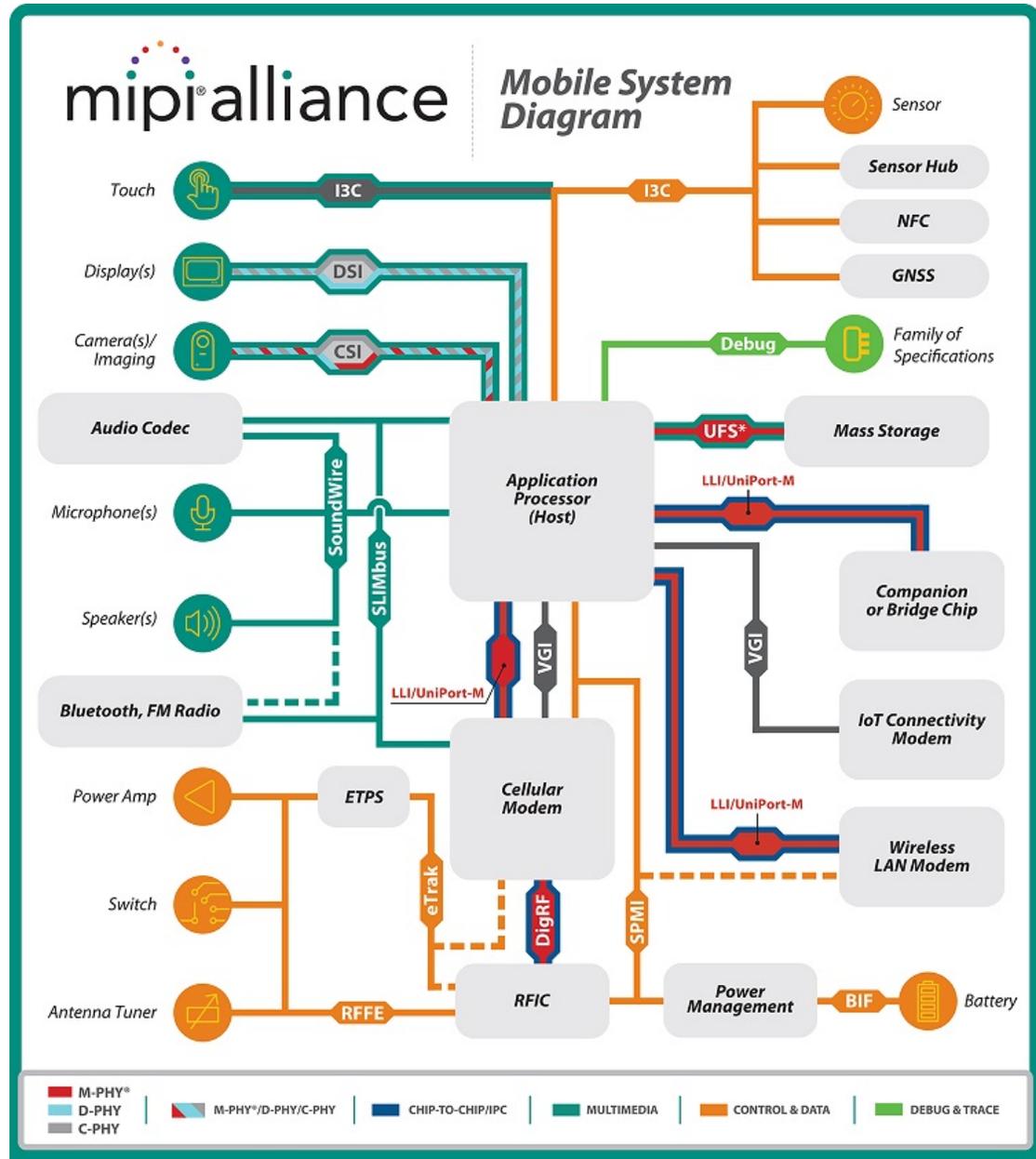


*The World of*  
***Bits, Pixels and Sensors***

Presented by **Dr. Aloknath De**  
Senior Vice President, CTO- Samsung India (SRI-B)

27 OCT 2017

# Marvelous Contributions of MIPI Alliance





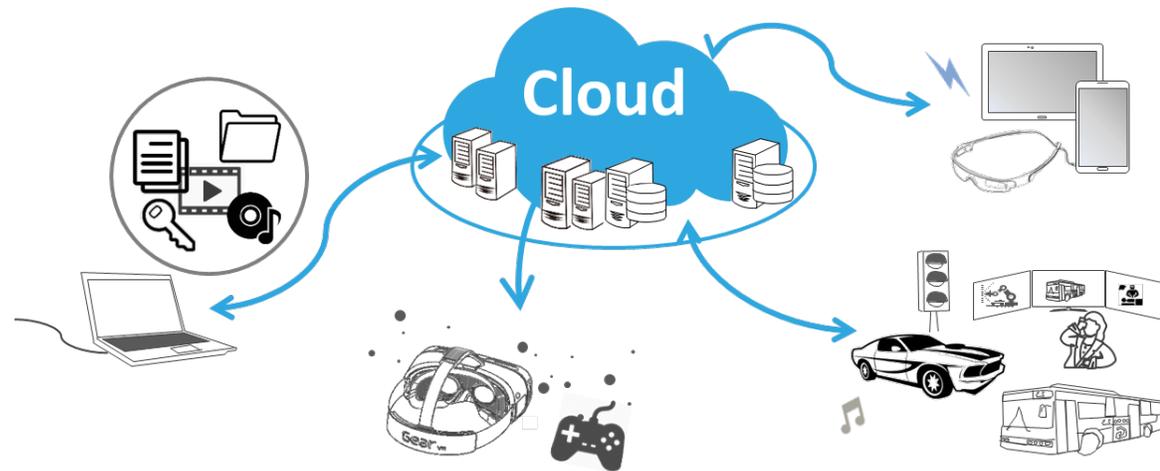
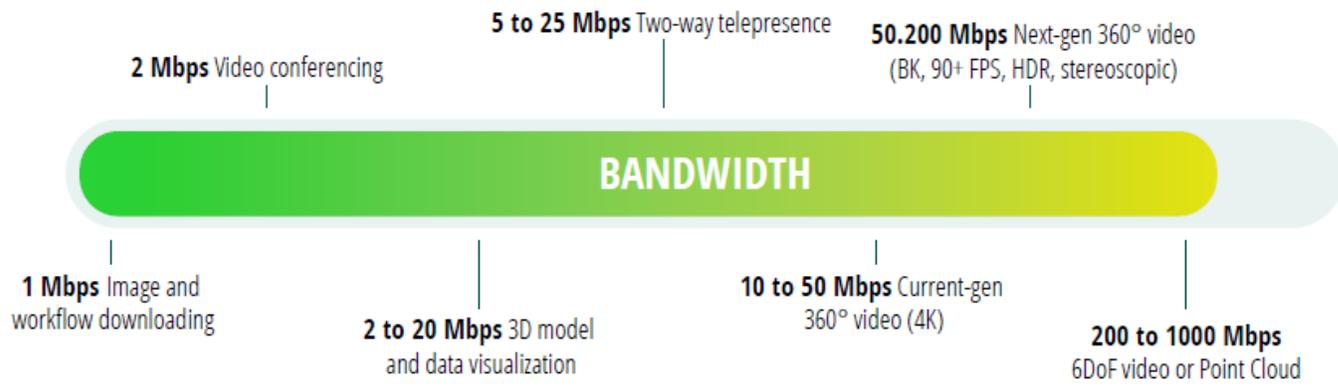
# Connected Thinking

October 18-19 | San Francisco | #SDC2017

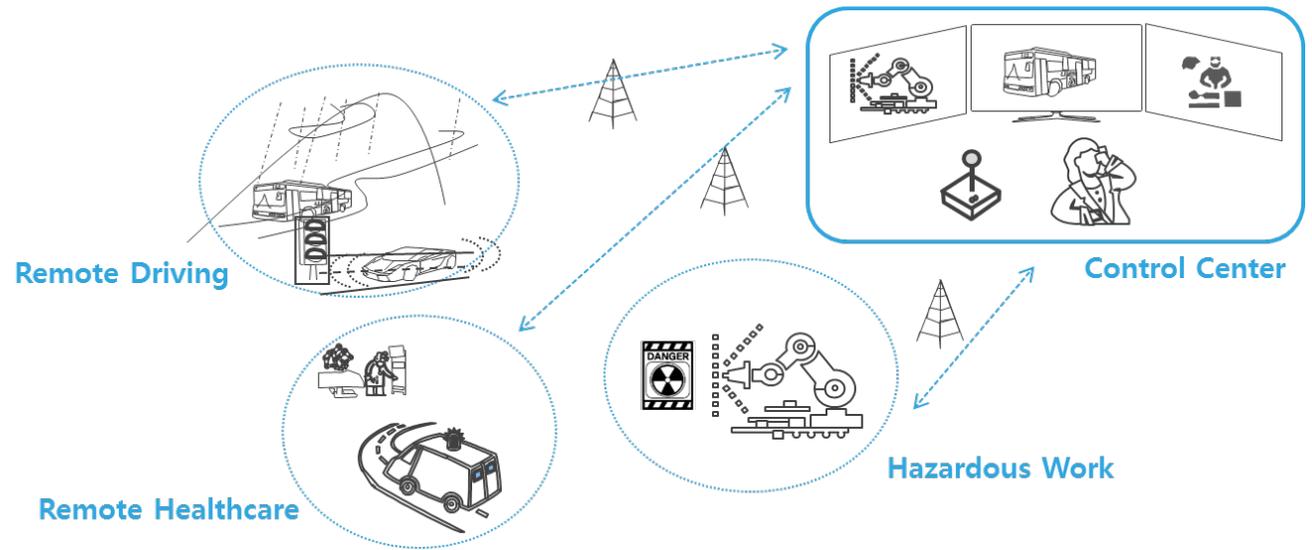
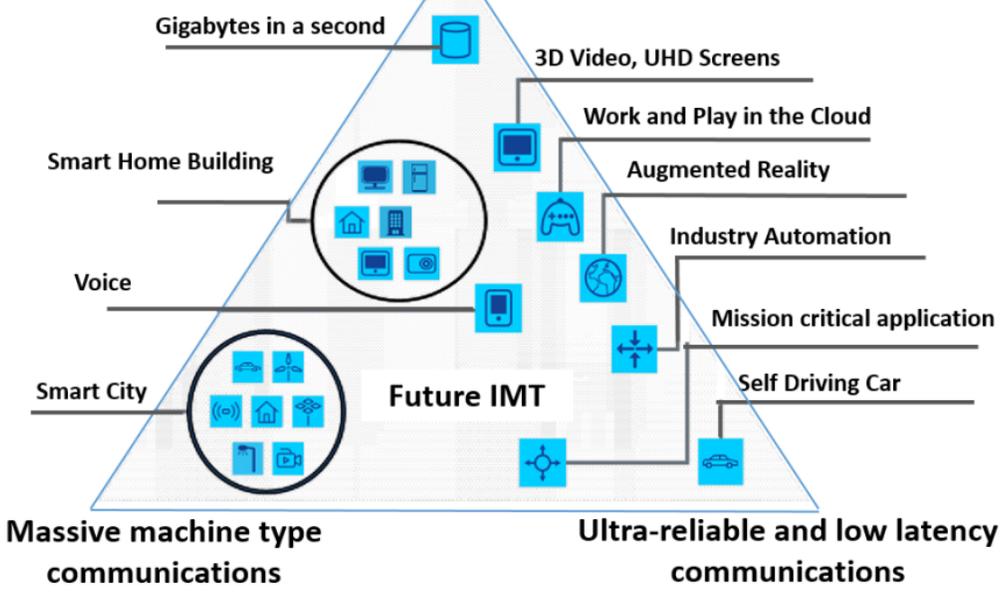
[SDC2017.com](http://SDC2017.com)



# What can you do with 5G?

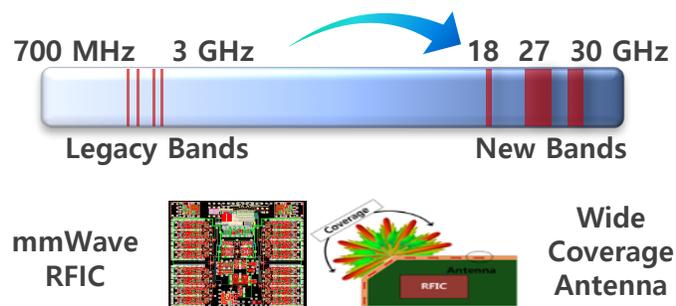


## Enhanced Mobile Broadband

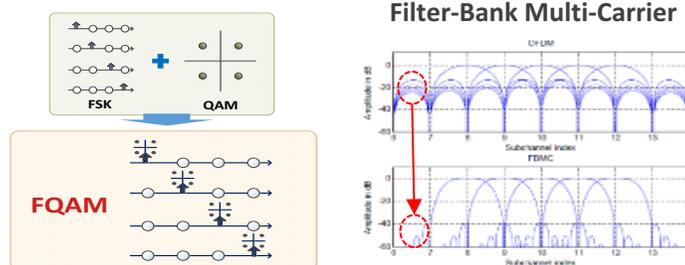


## Disruptive Technologies for Significant Performance Enhancement

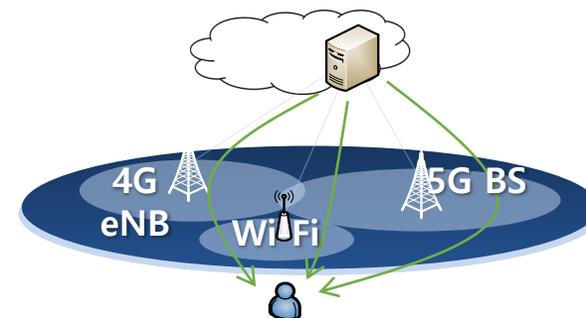
### > 6 GHz System/RFIC/Ant.



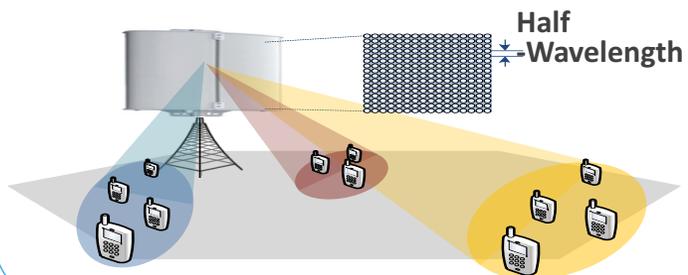
### New Waveform Design



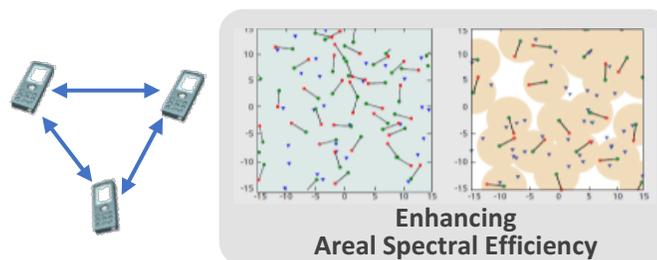
### Multi-RAT Interworking



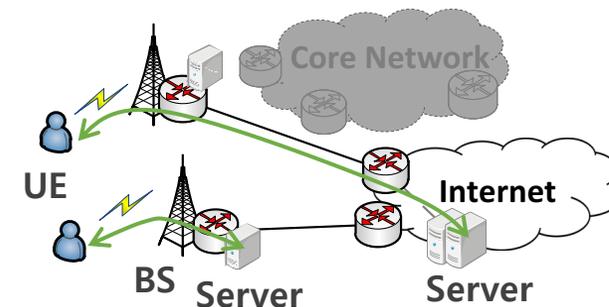
### < 6 GHz Massive MIMO



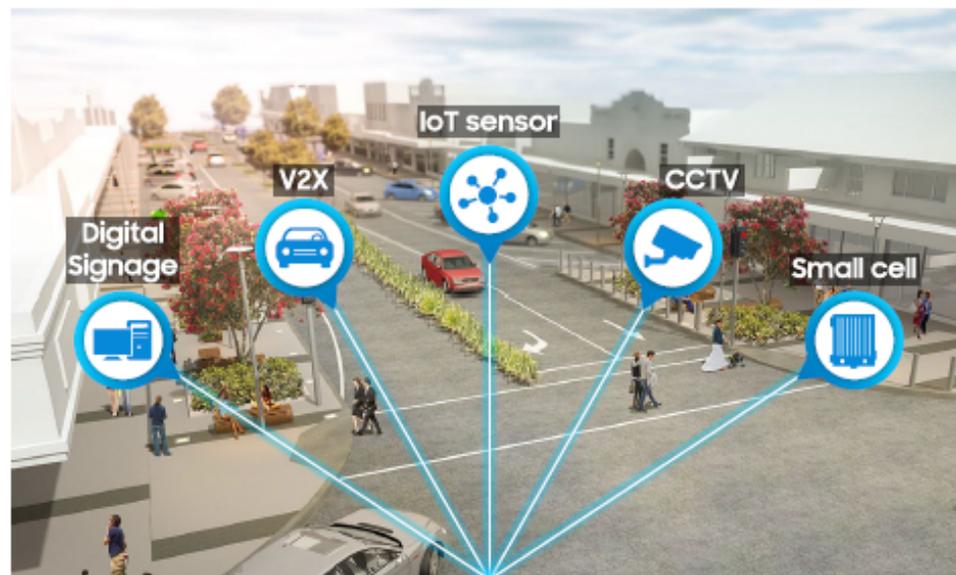
### Advanced D2D



### Enhanced Flat NW



## ✔ 5G Connectivity enables Collection, Delivery and Analysis of Live Data



### One Connectivity Node covers

(500m Radius)

	10 x CCTVs	10 x 24Mbps	= 240Mbps
	1 x Digital Signage	1 x 24Mbps	= 24Mbps
	5 x LTE Smallcells	5 x 240Mbps	= 1,200Mbps
	250 x sensors	250 x 256kbps	= 62.5Mbps
	5 x Public WiFi	5 x 300Mbps	= 1,500Mbps

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**Total 3Gbps**

# Samsung and KDDI 5G Handover Test

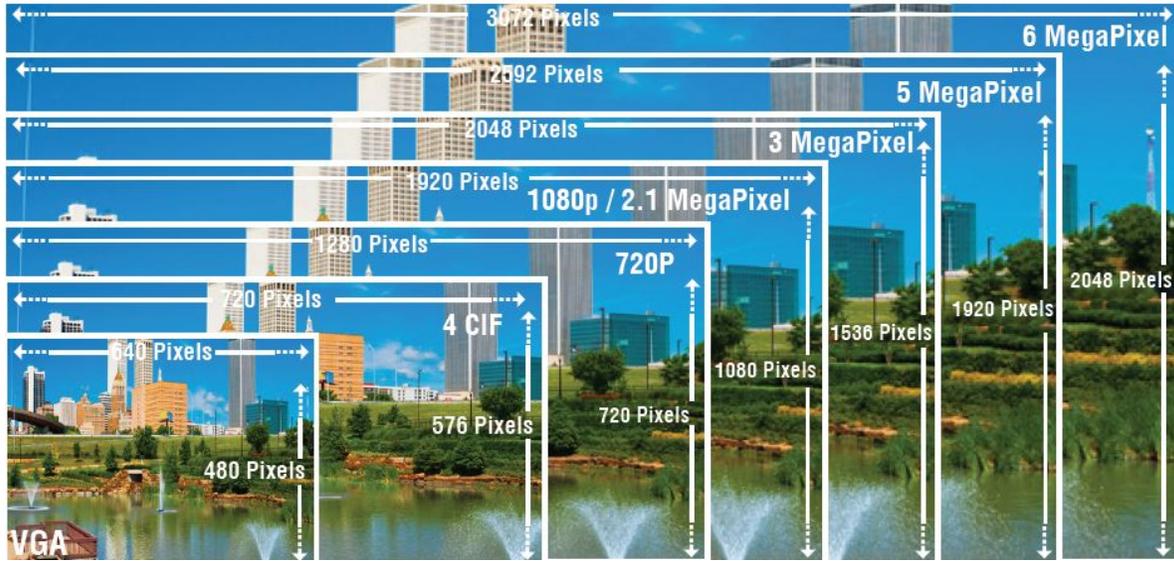
SAMSUNG



# ***Augmented Reality***

# Different types of Camera and Megapixels

## Megapixels



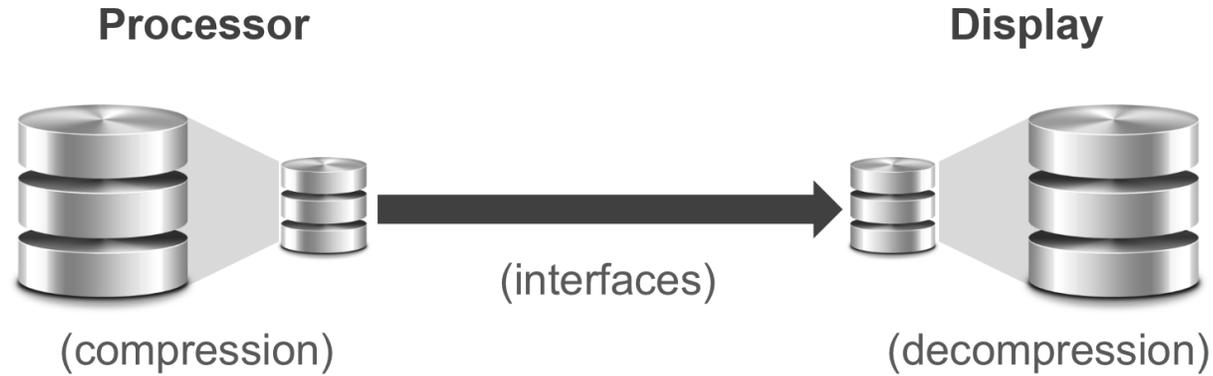
## Revolution of cameras



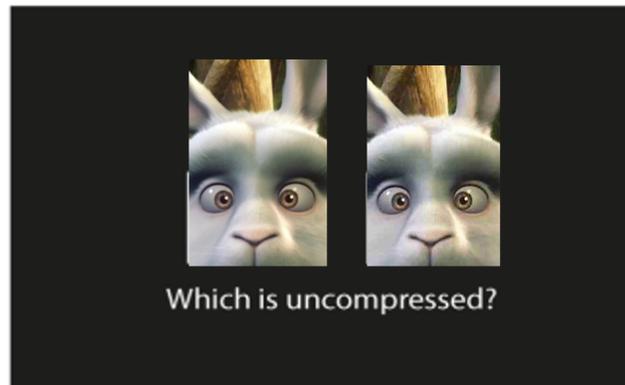
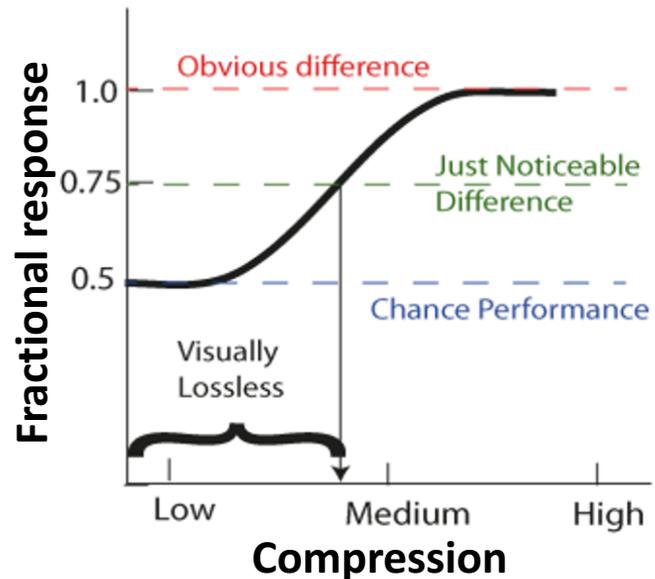
**Gear 360**



MIPI DSI and DSI-2 and VESA DSC compression



## ISO/IEC standardized procedure to verify image quality



# AR Overview and Applications

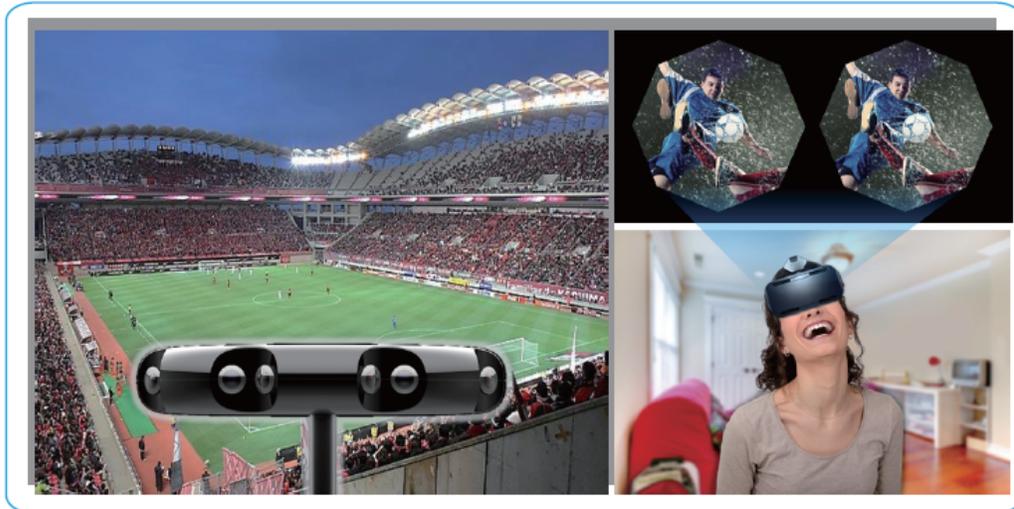
Motion Tracking



Environmental Understanding

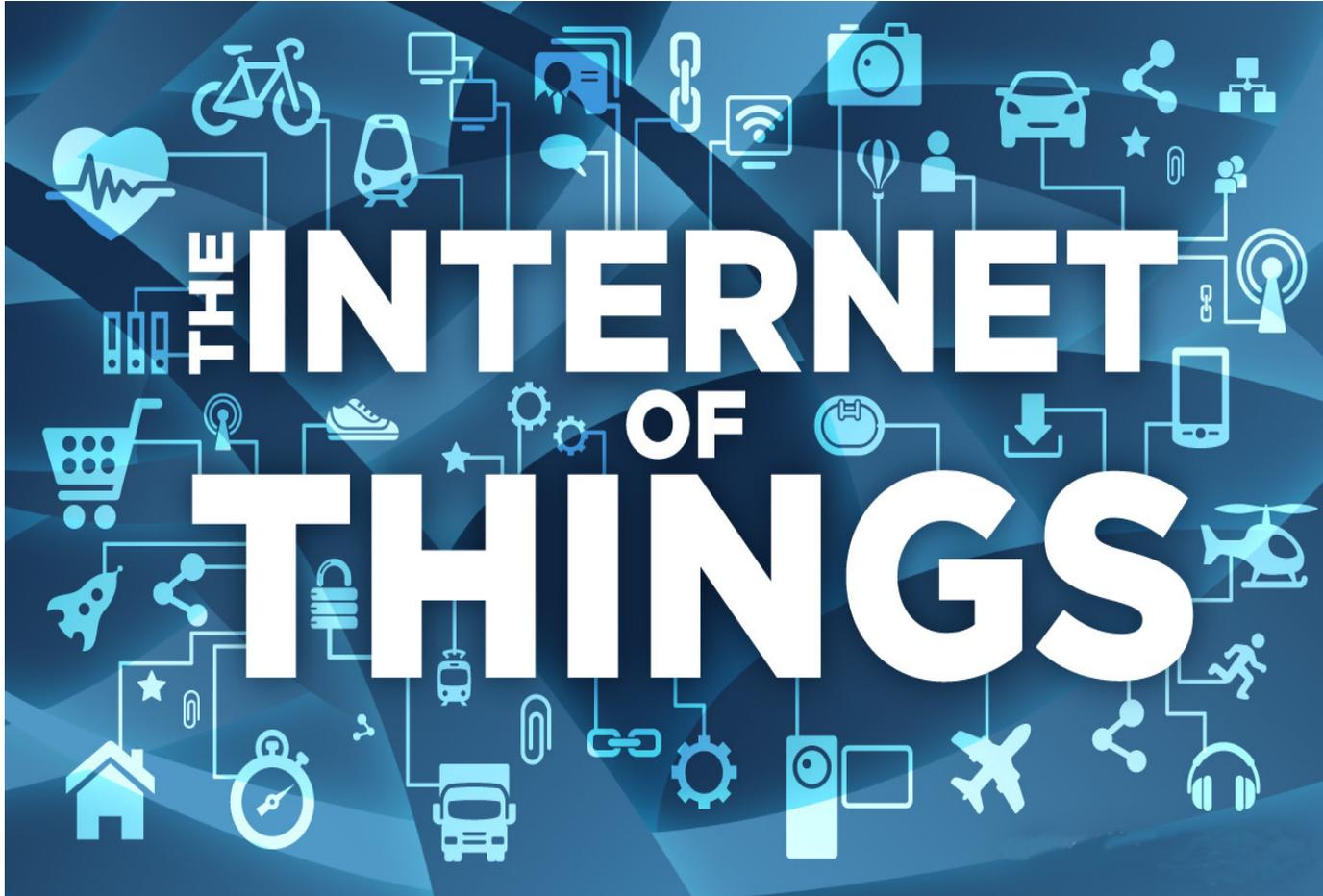


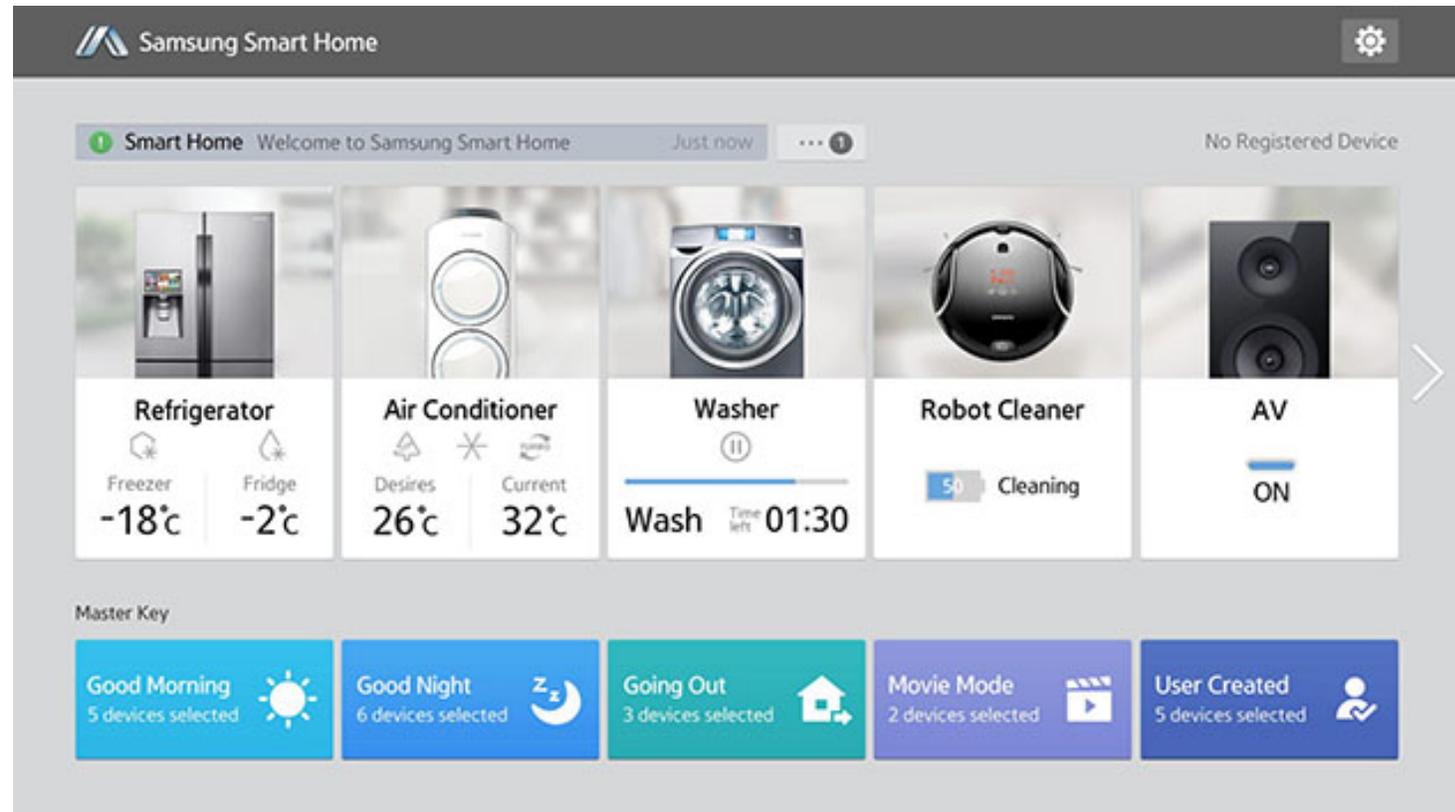
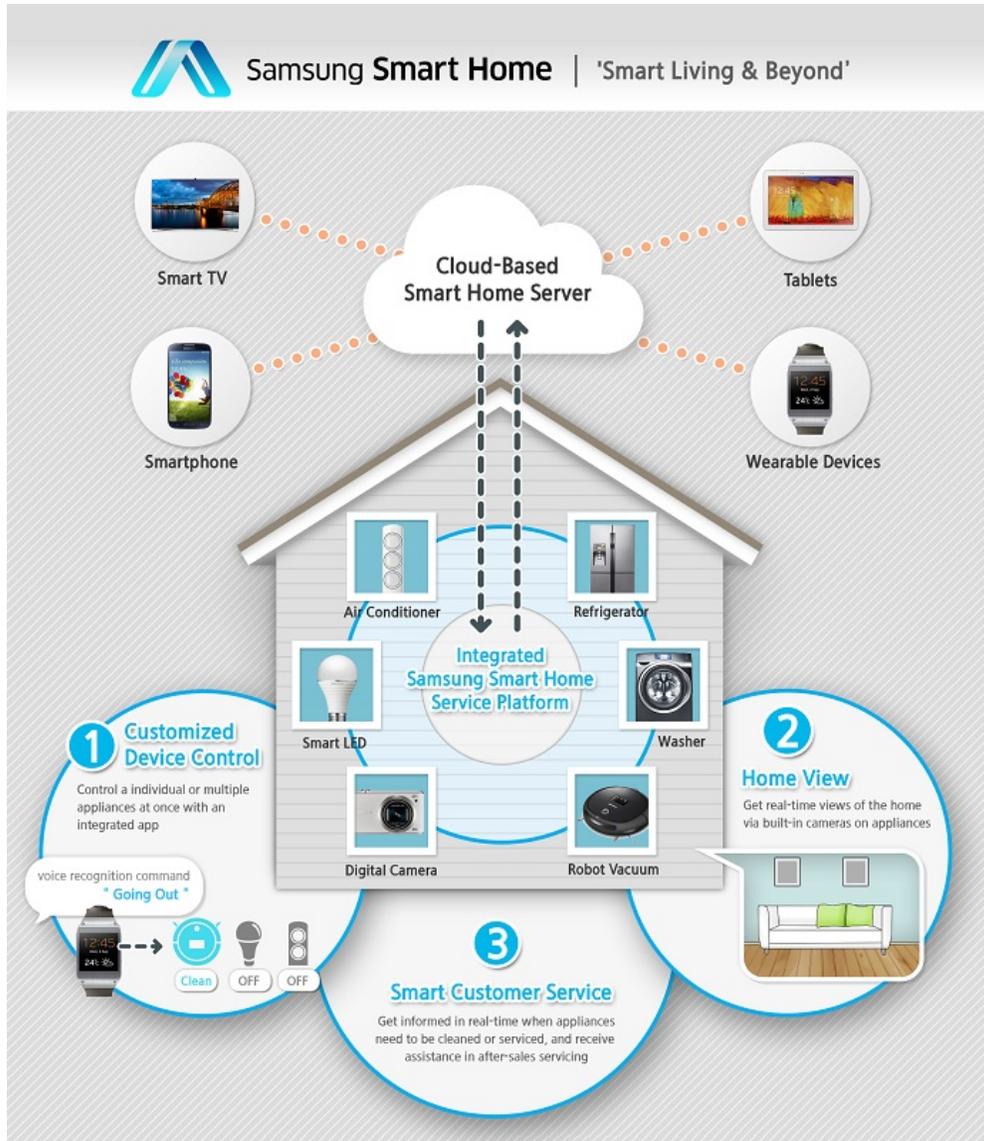
Light Estimation



***IoT***

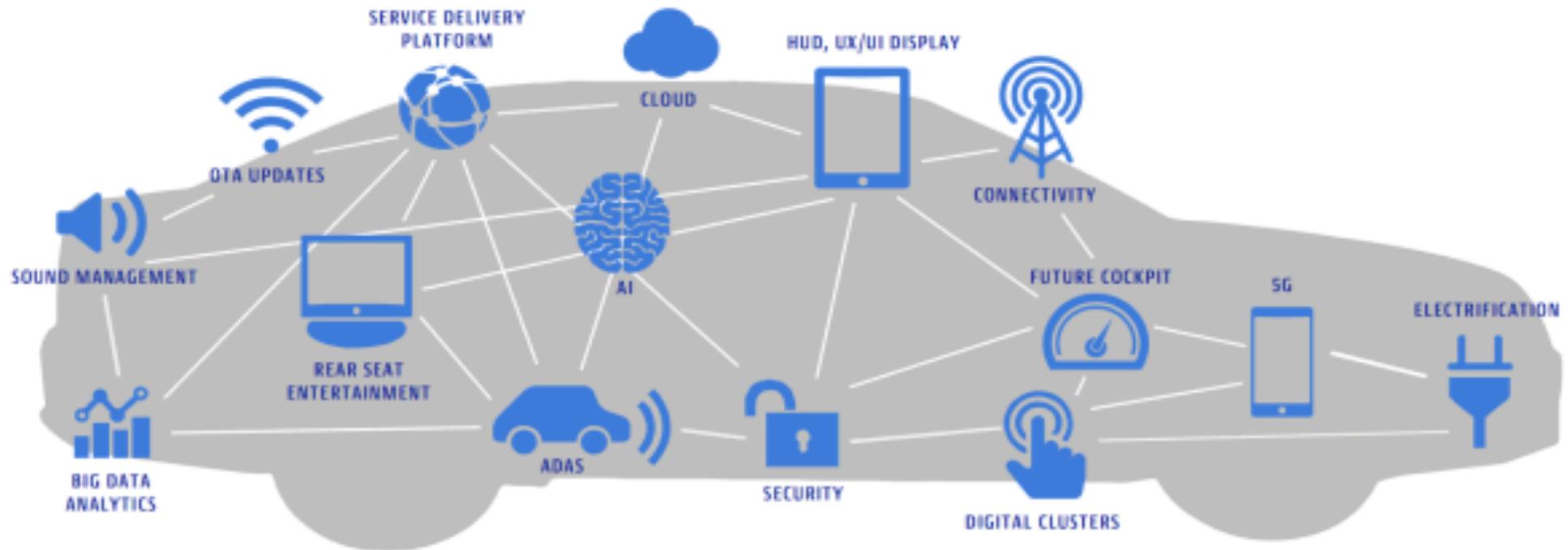
- 20 billion IoT enabled devices are available in the market
- Samsung enable 100% IoT ~ 2020





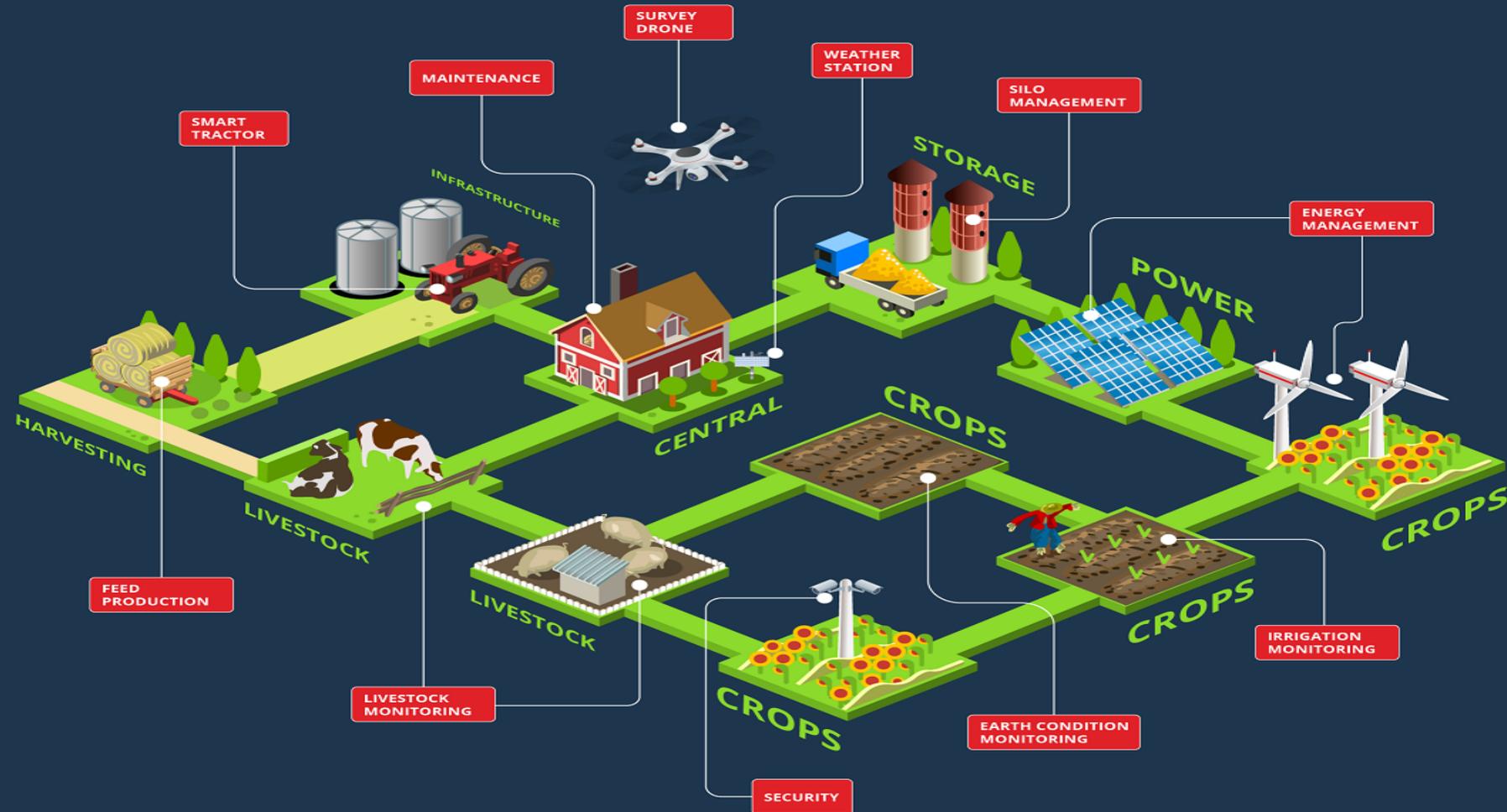
## Smart Technologies Will Enable the Vehicle of Tomorrow

The combination of Samsung and HARMAN will empower OEMs to rapidly deploy connected car technologies and services

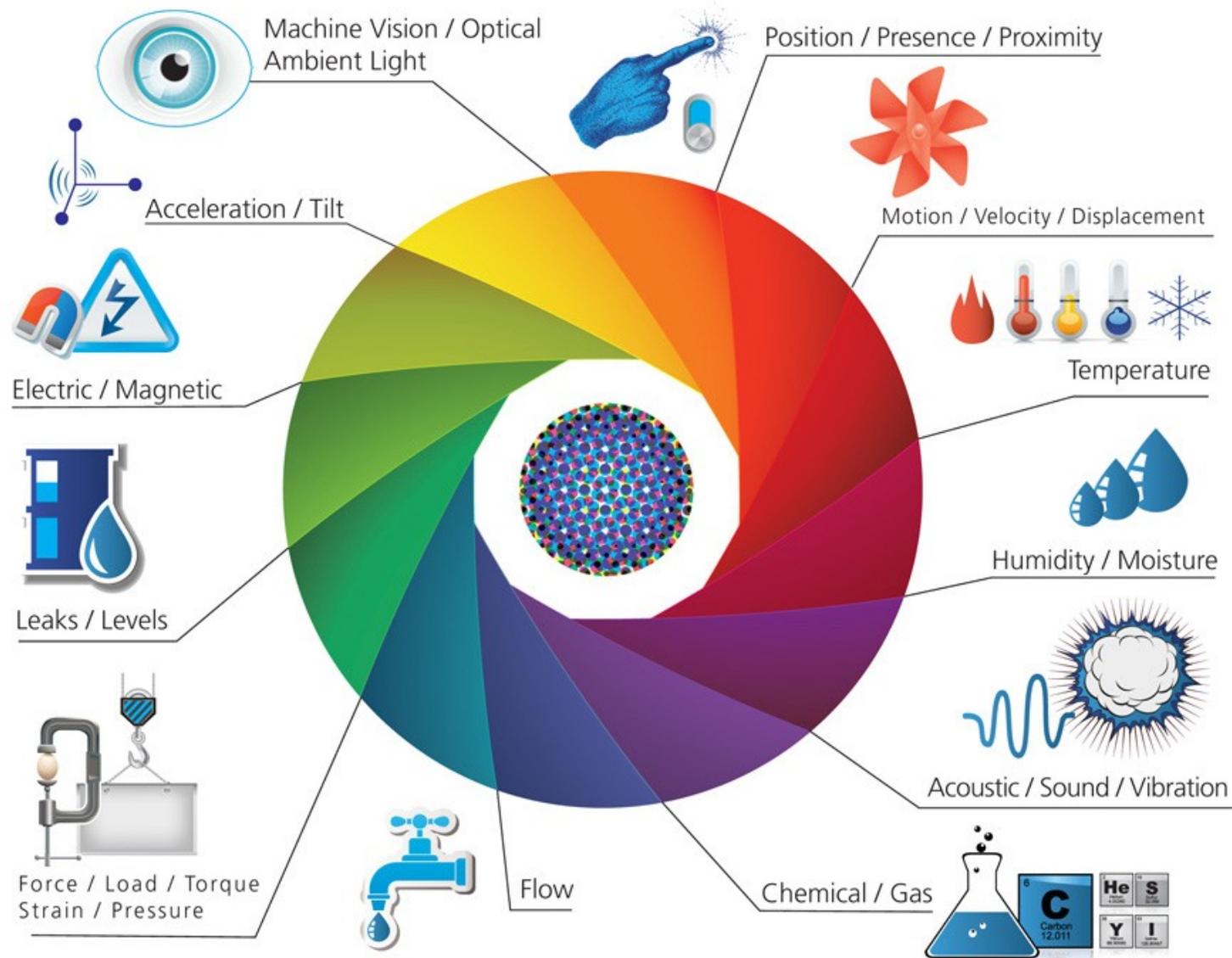




## IoT SMART FARM



FOR MORE INFORMATION VISIT [WWW.IOTNXT.COM](http://WWW.IOTNXT.COM)



Thank you