Movea:
Motion Sensing Everywhere

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Director of Marketing
May 30, 2012

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Company Profile

- Created in 2007 in Grenoble, France
  - Spin-off of CEA-Léti
- Motion Sensing pioneer and market leader with over 5 million units shipped
- 20 years of motion sensing & consumer electronics industry experience
- Focus on IP & technology
  - Over 250 man-years invested in R&D
  - **400 patents / 75 families**
  - Joint MotionLab with CEA-Léti
- 50 employees today and growing
- Global leader in motion-sensing technology IP, technology and solutions:
  - Mobile/Tablet
  - Interactive TV
  - Sports & eHealth

Grenoble, France

Pleasanton, CA

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MoveTV Customer Successes

- **Free**: World's leading IPTV service provider
- **SMK-Link/Gyration**: Leading supplier of innovative Computer Peripherals
- **Remote solution**: Remote control supplier for C&M (2nd largest cable operator, Korea)
- **#1 European Service Provider:** Remote/STB integrated solution – release Q3 '12 (partner w/SMK & Sagemcom)
- **French Service provider:** Remote/STB integrated solution – release Q3 '12 (partner w/Pace & Ruwido)
- **European Tablet MFG**: accessory remote – release Q3 '12
- **Sunrex**: Air Motion Keyboard ODM Remote (blackberry style keyboard w/SmartMotion)
- **Dell**: ODM Remote control
- **UEI**: Wavemotion ODM remote
- **4MOD:** Moos ODM remote
- **SMK Europe:** RemoPad ODM remote
- **Texas Instruments**: RemoTI RF4CE & BLE reference kit design remote
- **Nordic:** nRFready 2.4GHz RF & BLE Smart Remote
- **Greenpeak:** GP570 RF4CE remote control
- **SMK US:** Jade reference remote

Health, Sports & Other Customers

- **Decathlon**: world's top 3 sporting goods retailer
  - Nabaji –Swimmer - lap counting/MP3
  - Nabaji v2 – next gen Swimmer release w/ stroke detection (release Q3 '12)
  - Newfeel – Fitness/calorie monitor (release Q2 '12)
- **Top 3 Tennis OEM**: "Play & Connect" tennis racquet connected w/ mobile device (release May '12)
- **Hocoma**: Valedo - Range of Motion analysis & game driven rehabilitation solutions
- **RMI**: Bioval - Body movement analysis and physical therapy solutions
- Other projects under development including major mobile platform vendor

Movea: A Data Fusion Company

- **Aware**: Understand my context and bring me the right information

- **Pervasive**: Around me, on me, embedded in me. Wherever I am.

- **Seamless**: Easy to use, integrated, invisible UIs

- **Safe**: Myself, my systems and my data are secure

Agnostic Across the Board…

CM/ODM

- Universal Electronics — Putting You in Control of Technology®
- ruwido
- Ohsung Electronics Co., Ltd.
- Sunrex
- Forward Electronics
- SMK
- 4mod Imagine & Design
- Remote Solution — the Valuable Convenience

Sensors

- Analog Devices
- Bosch
- Epson Toyocom
- AKM
- InvenSense
- Kionix
- VTI Technologies
- Honeywell
- freescale semiconductor
- ST

Microprocessors

- Intel Atom inside
- GreenPeak
- Nordic Semiconductor
- ST Ericsson
- ARM
- NVIDIA Tegra 3
- radio pulse
- Texas Instruments

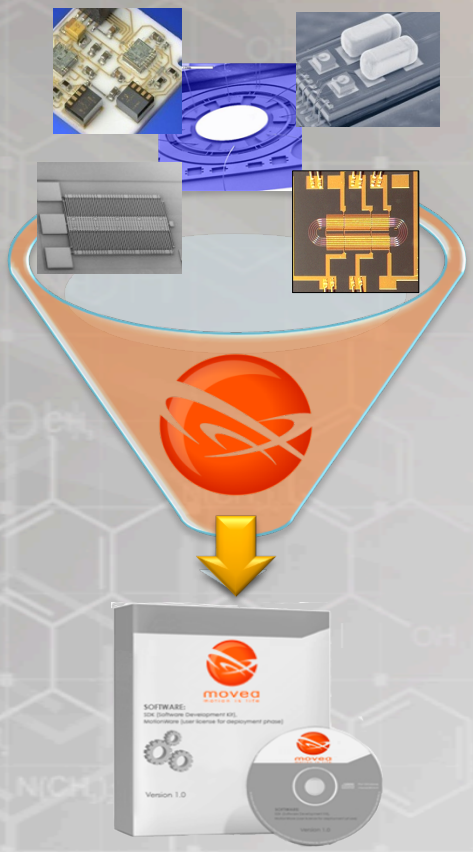
OS

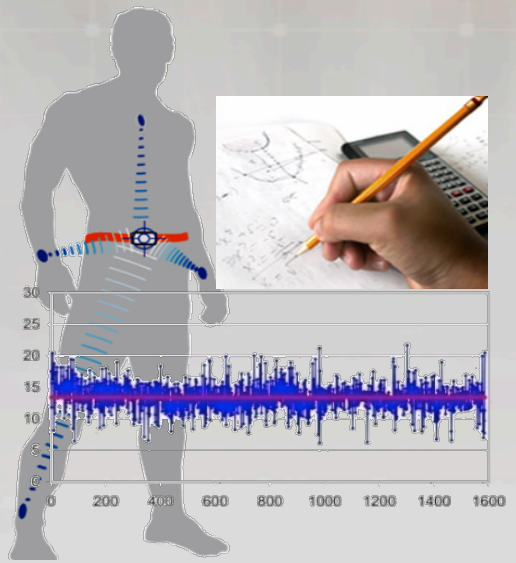
- ubuntu
- Windows 7
- android
- Mac OS X
- iOS
- Microsoft Windows xp
- Windows 8
- Linux

Wireless

- Wi Fi
- Bluetooth
- RF4CE

SmartMotion®: The Missing Piece





Raw Sensor Data | **Movea's Expertise** | Applications

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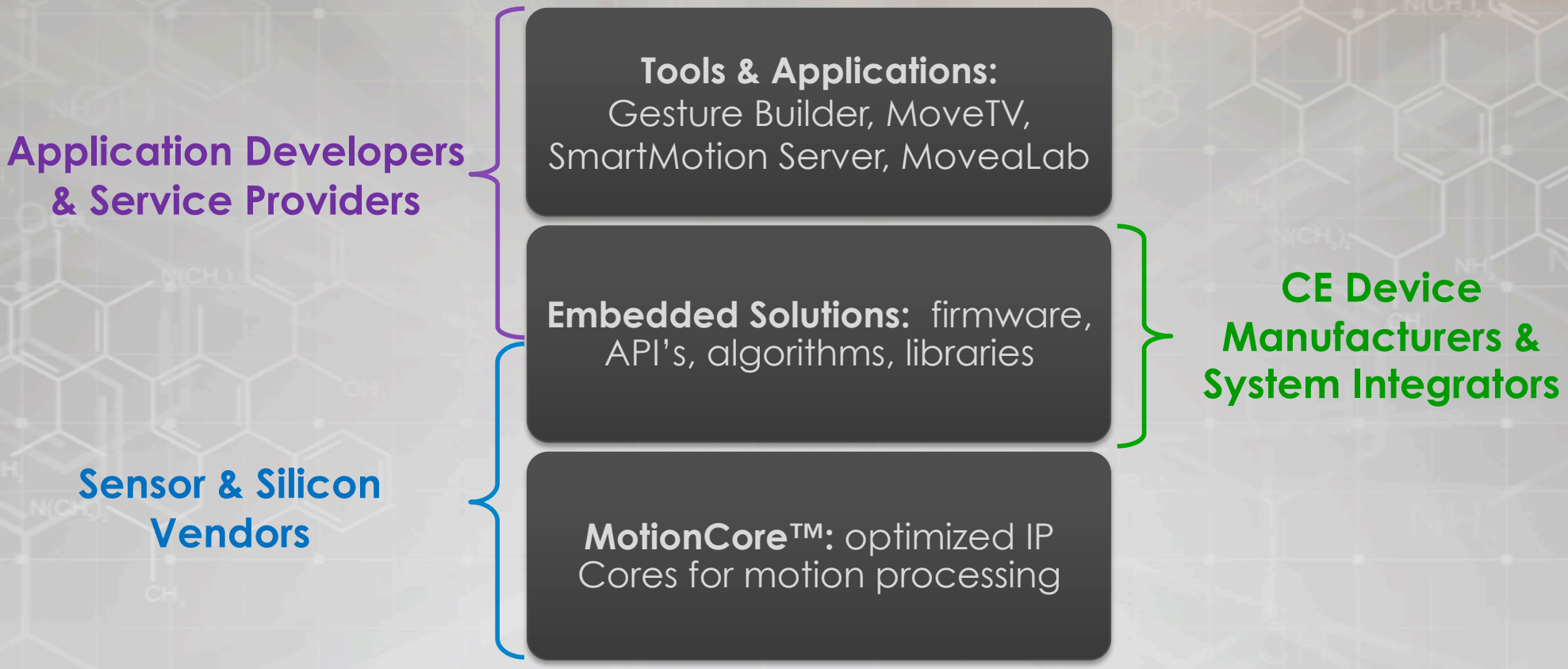
Movea's SmartMotion Technologies

Motion solutions that advance the entire value chain



The Chemistry of SmartMotion

- In developing our SmartMotion Technologies, Movea has identified the fundamental elements of human motion
- Through our Chemistry of Motion, we can rapidly prototype new features by combining atoms into molecules

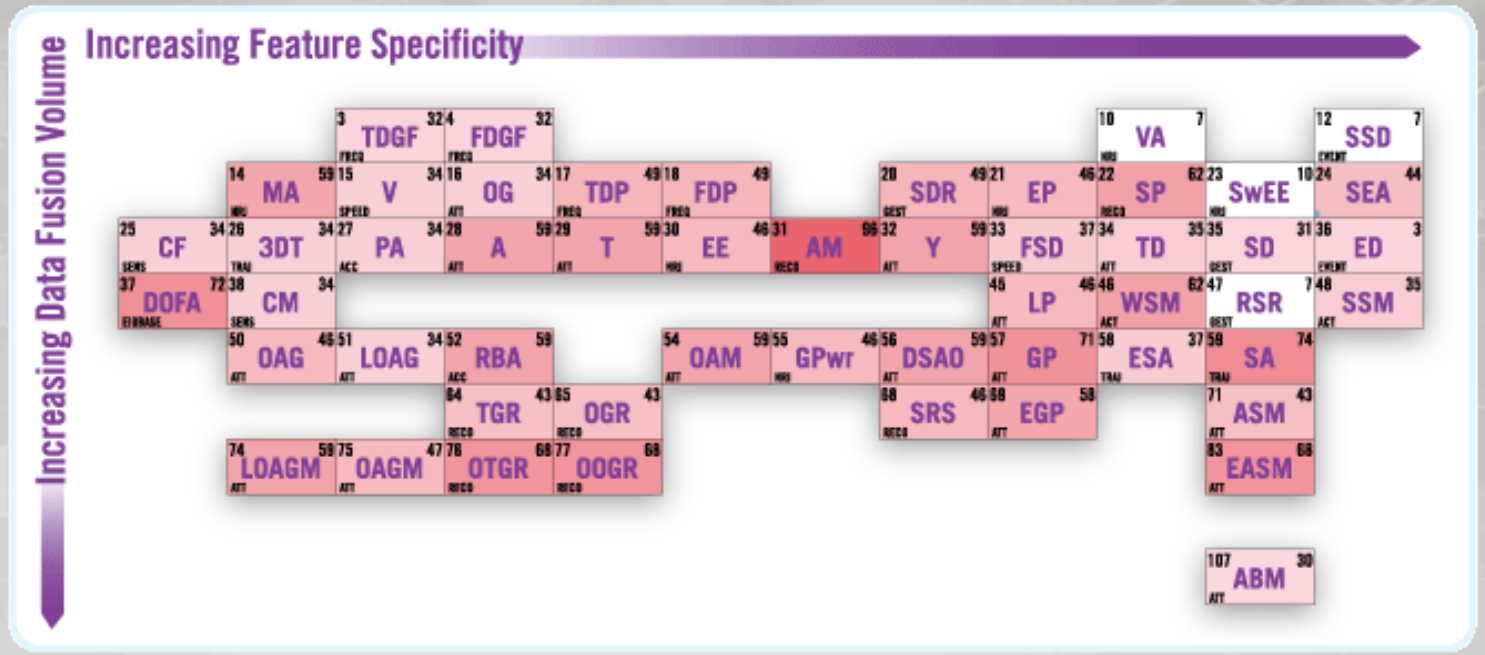
AM 2 **1D Angles** Angles Any														A 13 **Sweet Spot** Detection Hand	X 13 **3D Speed** Speed Any	AG 10 **Optimized 3D Acceleration** Trajectory Any
G|AG 5 **2D Pointing** Angles Any	A|G 10 **3D MMI Online** Recognition Hand													AM 25 **Elevator Detection** Detection Any	AM 10 **Planar Speed & Distance** Speed Foot	AGM 15 **Enhanced 3D Acceleration** Trajectory Any
AM 3 **Tilt Compensated Compass** Angles Any	G 1 **2D MMI Triggered** Recognition Any	A 6 **Walk Style** SpecReco Torso	A 13 **Energy Expenditure** Energy Torso											M 5 **Lap Counting** Detection Head	AGM 15 **Handheld Object Velocity** Speed Equip	AG 18 **Pedestrian Navigation w/ Map** Trajectory Foot
AM 5 **3D Angles** Angles Any	A 3 **Steps BW/FW L/R/Diag** Recognition Foot	A 5 **Posture** SpecReco Torso	A|G|M 15 **Rough Amount of Motion** Energy Any	AM|AGM 50 **Basic Avatar** MoCap Any										M 3 **U-Turn Chronodating** Detection Head	AGM 17 **Impacted Object Velocity** Speed Equip	AM 13 **Basic Pedestrian Navigation** Trajectory Torso
AG 13 **3D Angles** Angles Any	A|G 31 **Supervised On-Demand** Recognition Any	AGM 15 **Tennis Stroke & Spin** SpecReco Hand	X 18 **Power** Energy Head	AM|AGM 55 **Full Avatar** MoCap Any	A|G|M 7 **Basic Frequency** Frequency Any	AG|AGM 16 **True Acceleration** Acceleration Any								AM 5 **Stroke Count** Detection Head	A 8 **Speed & Distance** Speed Foot	X 12 **3D Trajectory** Trajectory Any
AGM 25 **3D Angles** Angles Any	A|G 35 **Advanced Supervised On-Demand** Recognition Any	A 2 **Swim Stroke** SpecReco Head	A 9 **Activity Matching** Energy Torso	AM|AGM 60 **Networked Avatar** MoCap Any	A|G|M 9 **Advanced Frequency** Frequency Any	AM 10 **Relative True Acceleration** Acceleration Any	A|G|M 10 **Repetitive Motion Force** Intensity Any							M 60 **Basic U-Turn** Detection Head	M 4 **Phased Foot Angle** Speed Foot	AM 9 **3D Foot** Trajectory Foot
AGM|AG 25 **3D Angles** Angles Any	A|G 15 **Online Continuous** Recognition Any	A|G 15 **Activity** SpecReco Any	A|M 15 **Energy Expenditure Swimming** Energy Head	AM|AGM 65 **Bio-Mechanical Avatar** MoCap Any	A|G|M 15 **Cadence** Fquency Any	AM 12 **True Foot Acceleration** Acceleration Foot	A|G|M 12 **Frequency Force** Intensity Any							A 65 **Stillness / Shock** Detection Any	M 11 **Stride Phases** Speed Foot	AGM 17 **3D Hand** Trajectory Hand

Movea Table of SmartMotion Elements

Movea Chemistry of Motion and IP

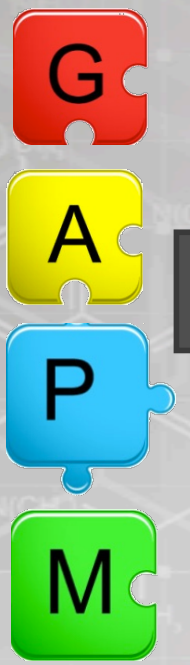
- SmartMotion "atoms" backed by more that 330 Movea patents.

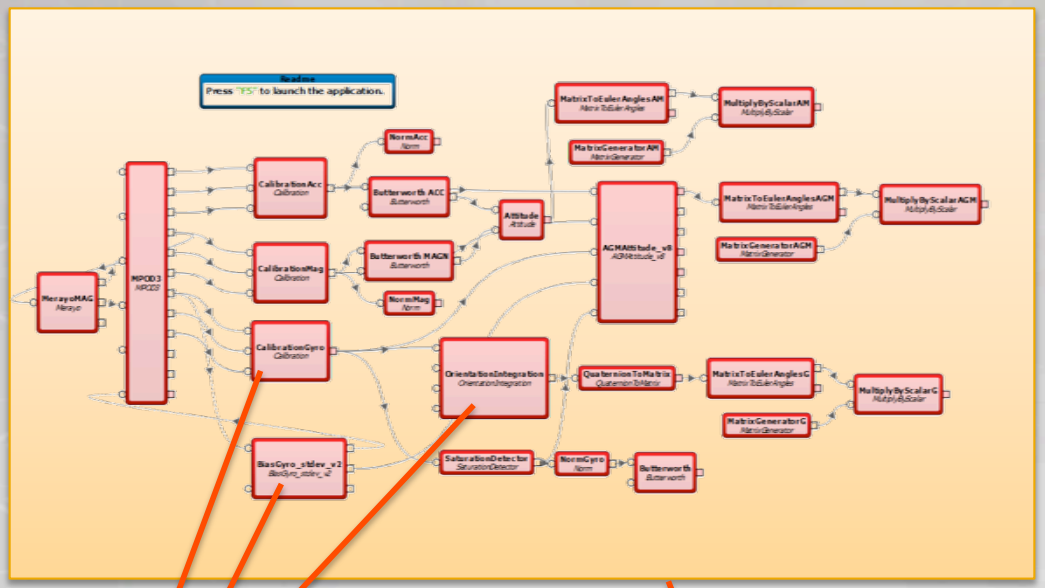
IP Heat Map of Movea SmartMotion Elements backed by over 330 patents



We Build Motion Features

MoveaLab: chemistry kit for designing the signal processing flows from sensor data to features





Atoms

Molecule

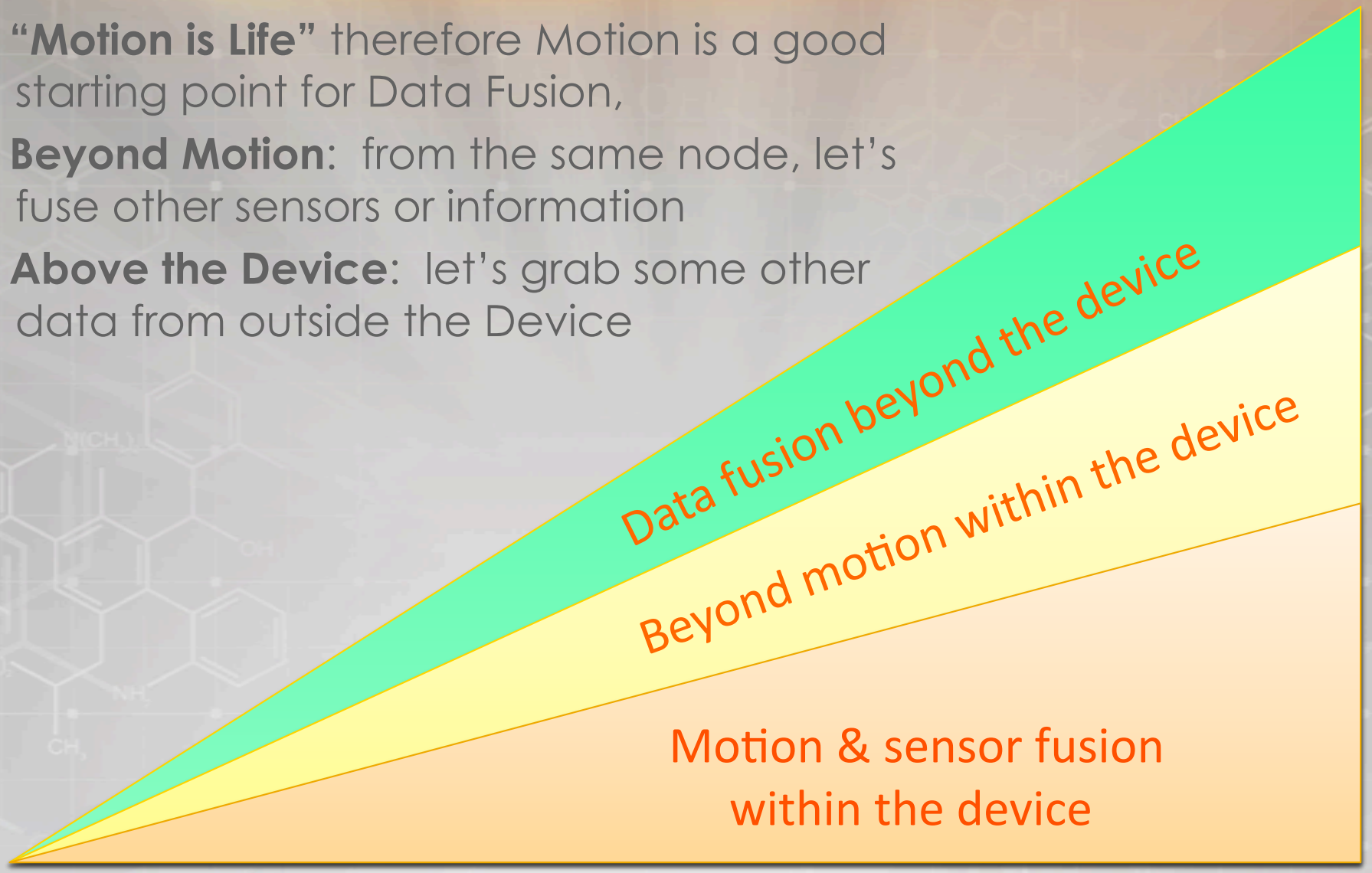
Interactive TV

Mobile

Sports & eHealth

Where can we go?

1. **"Motion is Life"** therefore Motion is a good starting point for Data Fusion,
2. **Beyond Motion**: from the same node, let's fuse other sensors or information
3. **Above the Device**: let's grab some other data from outside the Device



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