

# Redefining all industries

How IoT will transform business models in every sector

June 21 2017

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**ARM**

Insight for  
Technology  
Investors



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# ARM

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Technology  
Investors



## Diya Soubra

Senior Product Manager, IoT, ARM

- Comms designer (1990s...)
- Broadband and mobile cloud (2000s...)
- IoT systems propagation (2013+)

# This is not your father's IoT

# Microcontroller technology is ready

## TI Launches Low Power, Long Range Wireless MCU with 10 Year Battery Life

September 15, 2016

Share 0

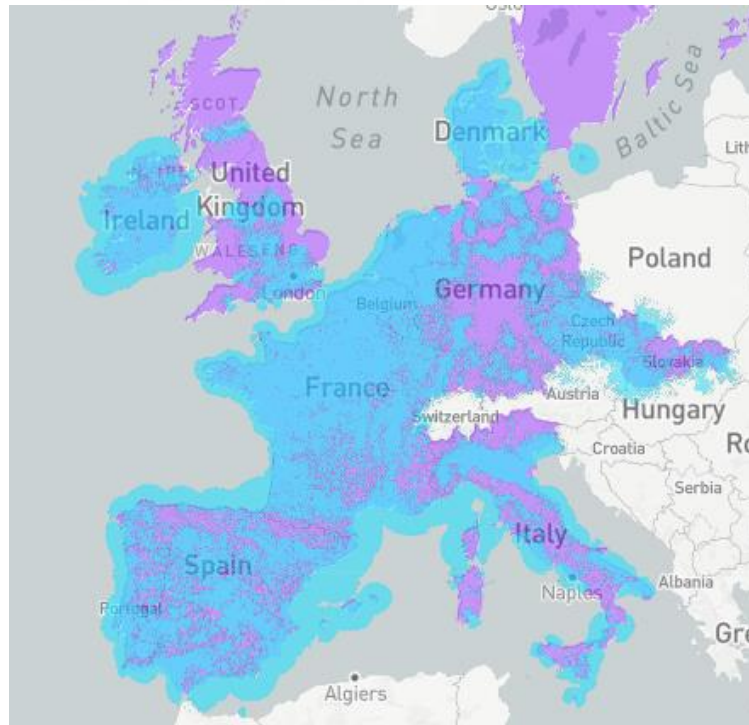
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Texas Instruments has announced the availability for mass production of the lowest-power dual-band wireless microcontroller (MCU) supporting Sub-1 GHz and Bluetooth low energy connectivity on a single chip. This Wireless MCU can be used for long range connectivity (up to 20 km) paired with ultra-low power consumption that offers a sleep current of 0.7 uA which allows for more than 10 years of battery life using a coin cell battery. It can be used for building and factory automation, alarm and security, smart grid, asset tracking and wireless sensor network applications.



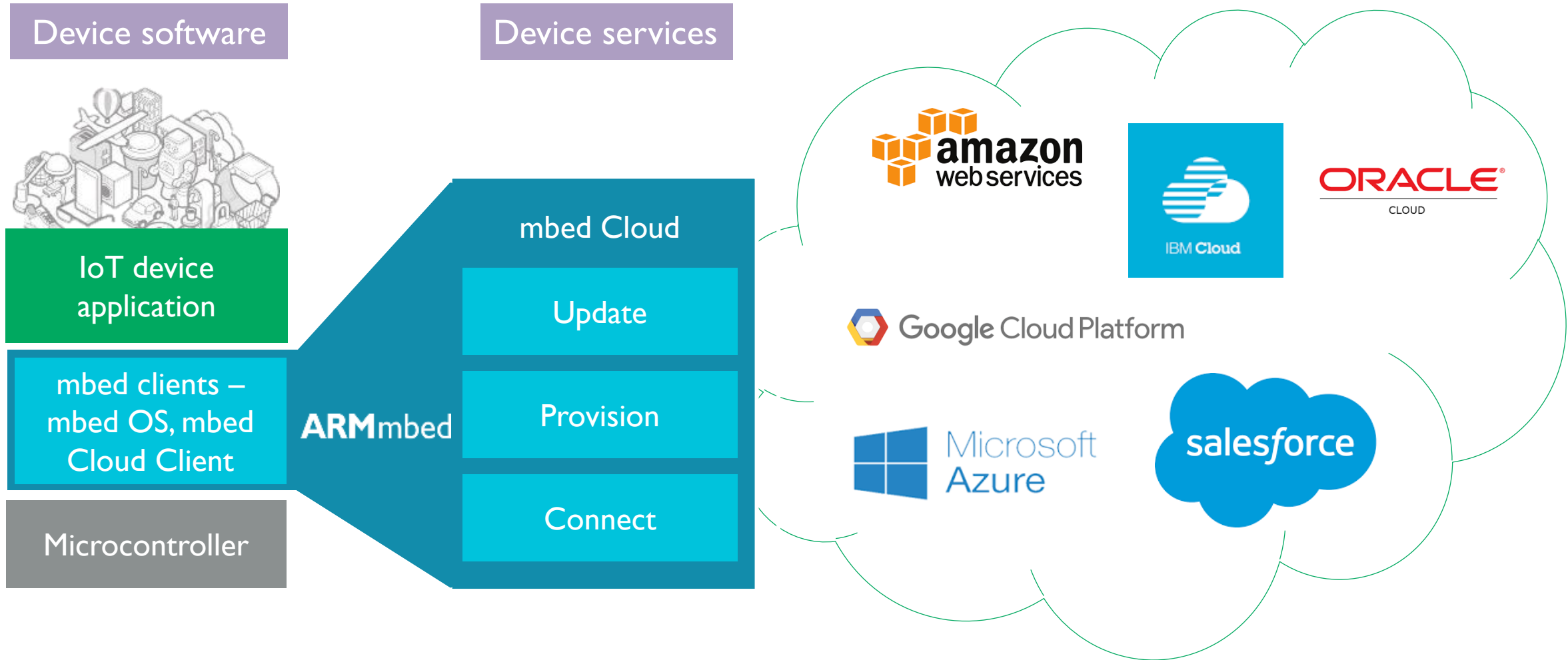
# Low power, wide area network radios are ready



<http://www.sigfox.com/en/coverage>



# Software and cloud services are ready



Now, it is a race to deploy



# Two routes to higher profits

## Increase efficiency

- Reduce waste
- Improve asset turn
- Eliminate accidents
- Inform investment decisions
- Reduce risk

## Add value

- Enhance customer loyalty
- Monetize data and analytics
- Migrate business model from transactions to service

# The Information Profit Margin

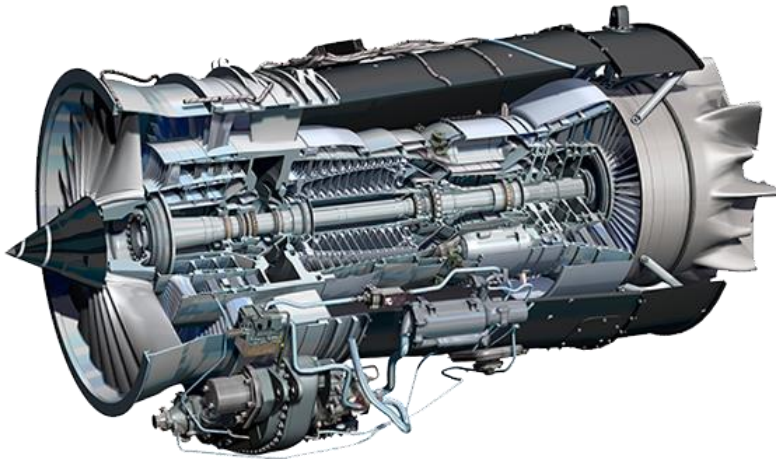


ABB's new condition monitoring solution for low voltage motors

A new era of remote condition monitoring for low voltage motors has arrived. ABB Ability™ Smart Sensor picks up data on vibration, temperature and other parameters and uses it to reduce motor downtime by up to 70 percent, extend lifetime by as much as 30 percent and lower energy use by up to 10 percent.

# Adding value to manufactured goods

High value goods



[www.rolls-royce.com](http://www.rolls-royce.com)

Low value goods



[www.mobileeurope.co.uk](http://www.mobileeurope.co.uk)



# Goods as a service



Introducing HP Instant Ink

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for as low as £1.99 a month.

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[www8.hp.com](http://www8.hp.com)

# Goods as a service

Aligning customer and supplier interests

Progress from this...



...to this

**Digital Farming:** Enabling Farmers to  
Protect Our Planet through Digital Solutions



Using Digital Farming technologies, farmers can optimize their business management – save time, lower costs, increase yields and use the planet's resources more efficiently and sustainably.

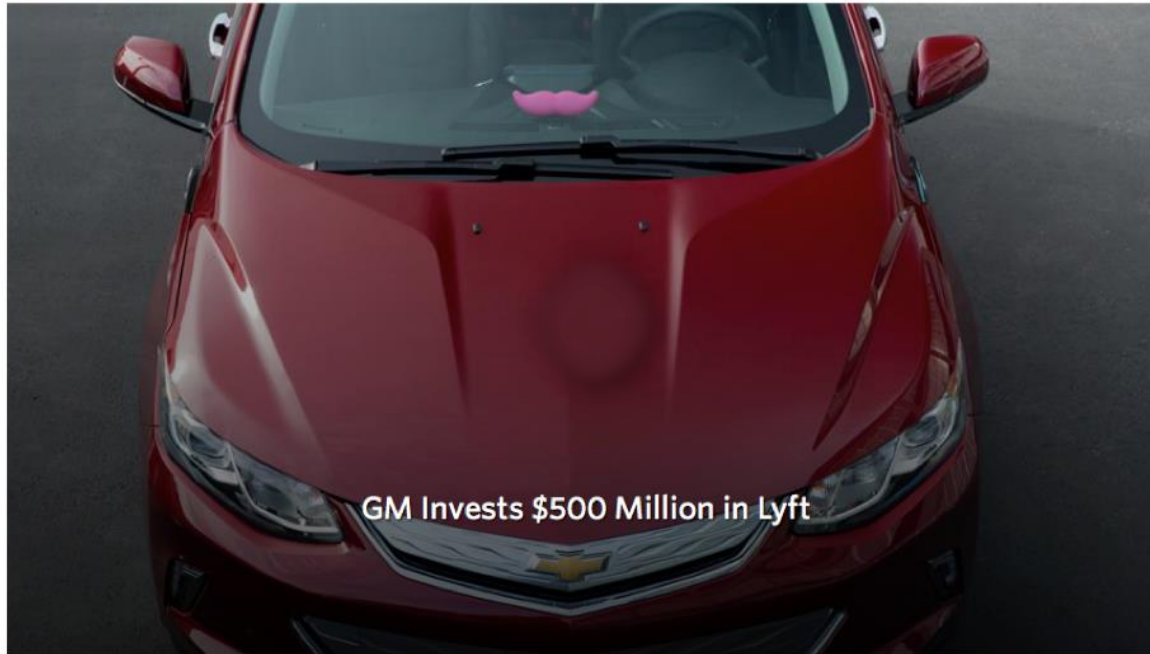


# Goods as a service

## The sharing economy

### GM Invests \$500 Million in Lyft, Plans System for Self-Driving Cars

Auto maker will work to develop system that could have autonomous cars appear at customers' doors



General Motors is the first major car maker to invest in a ride-sharing service such as Lyft. GM will work with Lyft to develop an on-demand, self-driving car system. Photo: GM

# Goods as a service

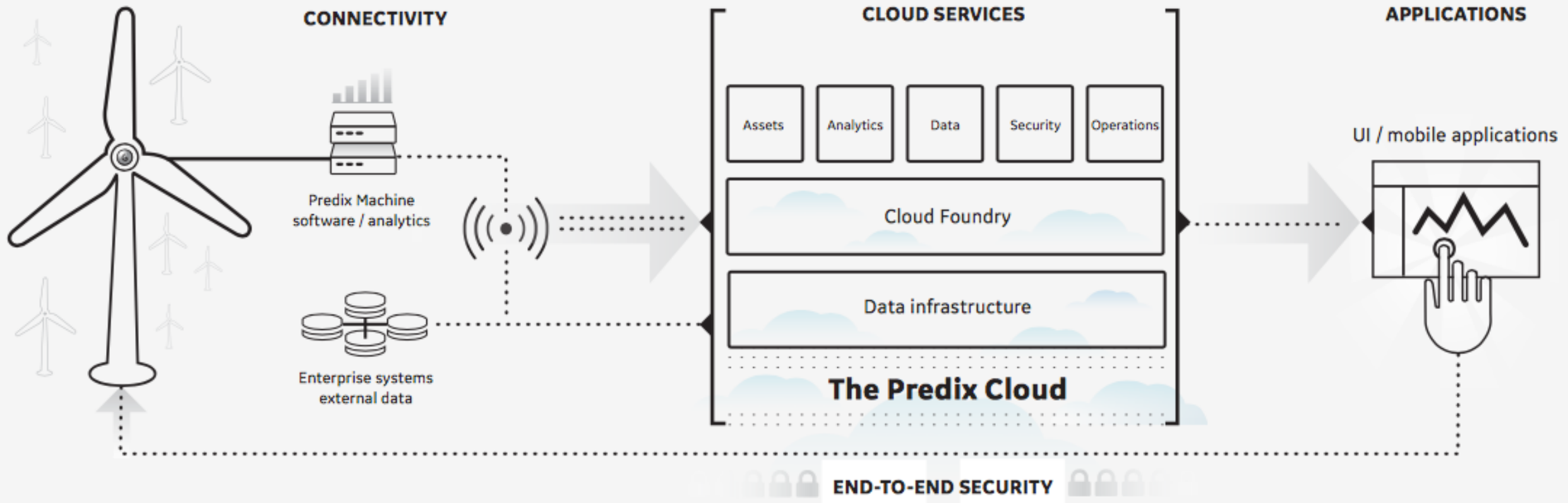
## Real-time yield management

- WASH improves asset utilization with live prices that shift demand to off-peak periods



# Goods as a service

## Predictive maintenance





# Adding value through personalisation



## Adidas Futurecraft: The Ultimate Personalized Fit

# The top line impact of successful IoT

- **Revenue visibility** from just-in-time orders
- **Repeat business** from loyal customers
- **Premium pricing** for personalised goods
- **Increased asset turn** with real-time pricing
- **Better products** based on live customer feedback

# How IoT will redefine all industries



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# How IoT will redefine all industries



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## Personalised car insurance



## Data

+

## Analytics

$$=$$

Value

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Customer data enables companies to sell products that are tailored to individuals

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## One-touch FMCG orders

amazon **dash**  
BUTTON



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IoT can win customer loyalty



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Companies who supply equipment which is costly to run  
can use IoT to save their customers' money

# How IoT will redefine all industries



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Connected services add value to your product

**Vi**  
**AI Personal Trainer**

\$249.00

★★★★☆ 80 Reviews



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Consumers pay a premium for devices  
that offer a valued connected service

# How IoT will redefine all industries



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## Goods as a service



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<http://www8.hp.com/uk/en/instant-ink/overview.html>

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HP used data collected by its printers to create  
its ink subscription service



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## Data mash-up example



Combining data from multiple sources can yield valuable results

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The rapid pace of technological change has enabled fast-moving new entrants to disrupt established markets

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A few of the partners who are using  
ARM technology to enable IoT





*For more content from ARM's IR team, visit:*

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