

# Bringing Insurance to the Internet of Things

## **ASRA** *Lunch and Learn*

W. Brian Harrigan  
March 5, 2020



# Insurance and IOT

- What is the Internet of Things?
- The Importance of Data
- Information on Risks
- IoT & Insurance Combined

# What is the Internet of Things?

## A network of internet connected devices (Other than phones)

### Devices

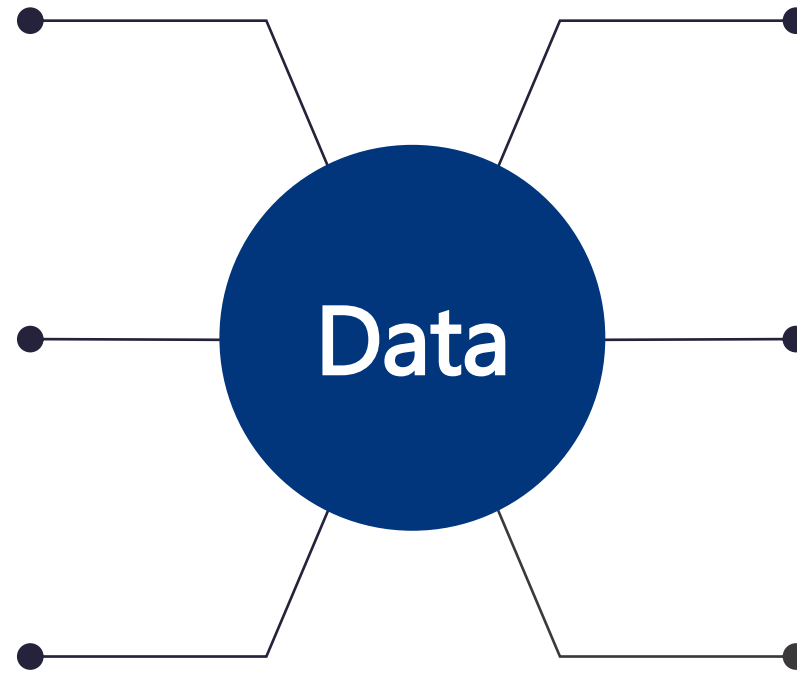
Smart Speakers, Home Sensors and Wearables

### Employees

Gig workers, healthcare professionals, commuters

### Emergency Services

Police, fire, emergency services; professional call monitoring



### Individuals & Families

Parents, children, spouses even pets

### Passive and Active

Activity from exercise to notifications and alerts

### Insurance

Driving patterns, fitness habits, Geo-location, duration of activities

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# The Importance of Apps

An IoT device is merely a piece of hardware until it is **connected** through an App

## Apps Dictate:

- The type of data collected
- How it is shared
- With whom it is shared
- What actions might be taken



## Internet/Data Connections via:

- BLE: Bluetooth Low Energy
- Wi-Fi
- LTE: Long Term Evolution (Cell Towers)
- OBD: On Board Diagnostics

# Why Is IOT Relevant?

1/13/20



*“According to McKinsey, an estimated 127 new devices connect to the Internet every second.. with 43 Billion devices worldwide by 2023.”*

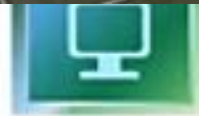
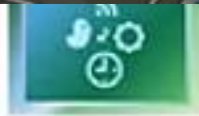
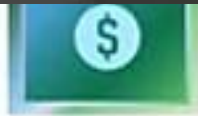


ISSUE NUMBER: 39

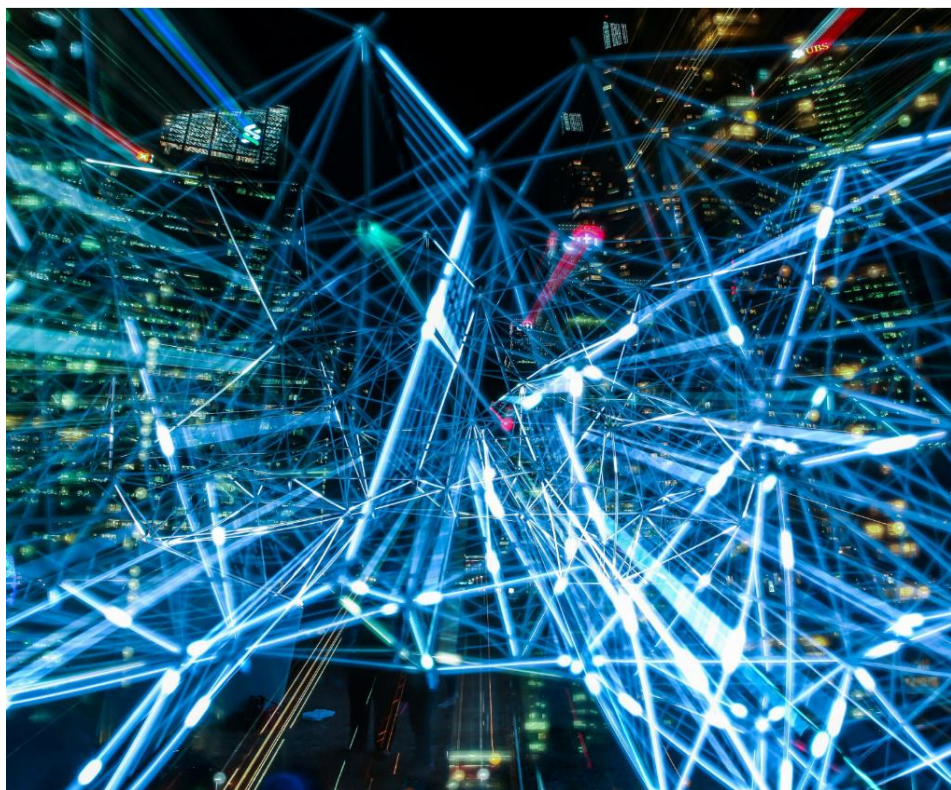
ISSUE DATE: 20/02/2020

## Digital ecosystems for insurers: Opportunities through the Internet of Things

February 2019 | Article



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## NAIC Innovation and Technology Task Force (1/13/2020)

The use of IoT sensor data creates many opportunities. IoT technology- with the proliferation of data from sensors and smart devices- presents opportunities for insurers to:

- Reduce and mitigate losses
- Improve Underwriting
- Enhance the personalization of products and services

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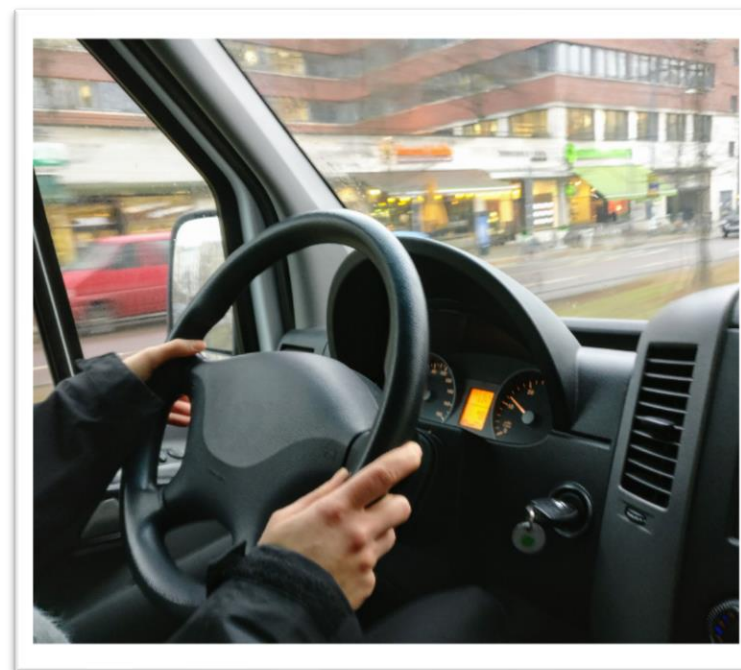


## Connected Devices with Insurance Applications

Connected Homes



Connected Vehicles



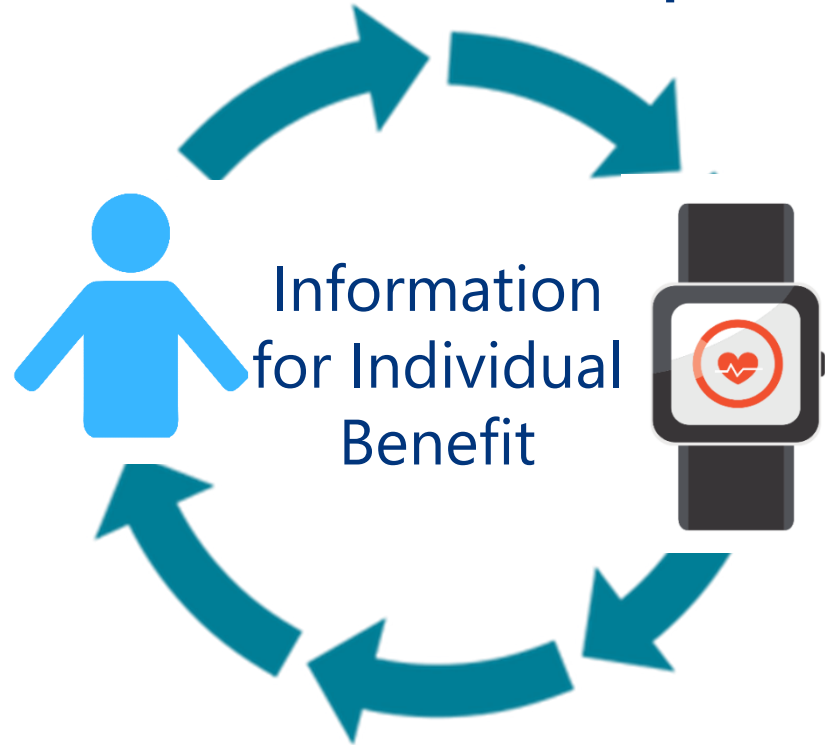
Connected People (Wearables)





# The Importance of Data in the IoT

## Closed Data Loop



## Shared Access



## Insurance products require “Actionable Data”

“Is my house flooding?”



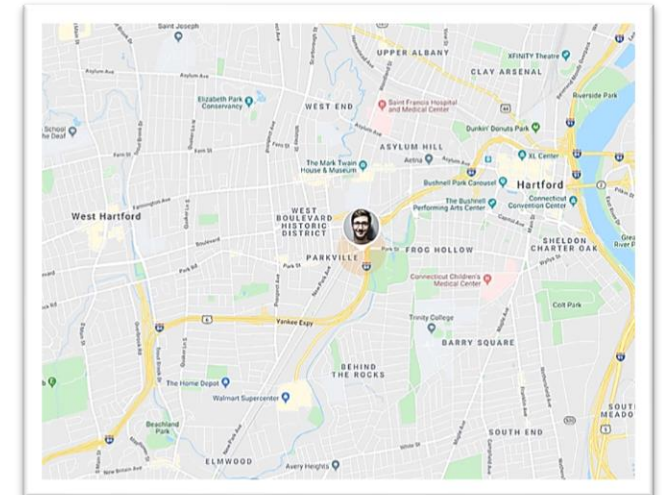
Home

“How am I driving?”



Auto

“Where Am I? Am I Safe?”



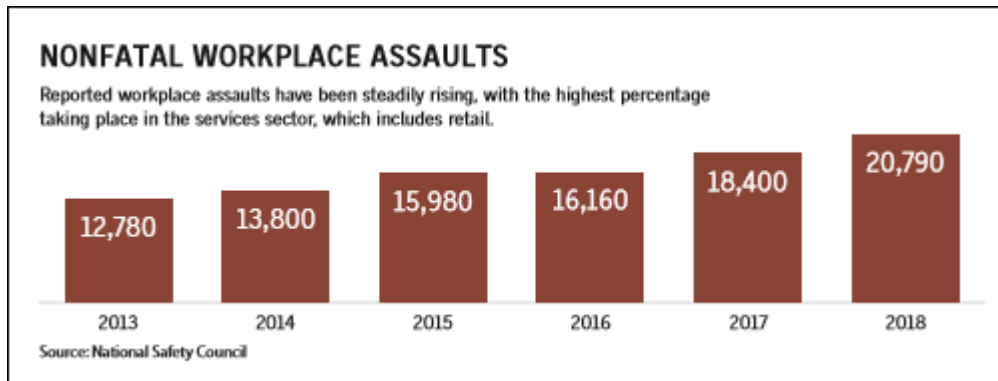
Life, Accident & Health

Who is getting this information? And what are they doing with it?

# A Problem (An Opportunity)

*“Overall, the numbers indicate a bleak trend; year over year figures from the National Safety Council show a steady uptick in workplace assaults for all industries, with the largest percentage of these occurring in the service industries.”*

*- Business Insurance, February 2020*



## NEWS ANALYSIS

### Assaults complicate comp claims

BY ANGELA CHILDERS  
achildren@businessinsurance.com

As workplace violence rates in the retail and restaurant industries continue to rise, workers compensation experts say claims arising from such incidents as robberies and assaults are complex and expensive and often include a costly mental component.

From the well-publicized brawls at several Popeye's fast-food establishments nationwide over its popular chicken sandwich, to the annual Black Friday rush and tumbles for discounts, the trend toward employees getting injured in the mix has the comp industry taking note.

In November 2019, 17 fast-food workers filed a lawsuit against McDonald's Corp., alleging the company failed to address worker safety at more than a dozen Chicago-area restaurants and documenting a "daily risk of violence while at work" in restaurants "nationwide."

Overall, the numbers indicate a bleak trend: year-over-year figures from the National Safety Council show a steady uptick in workplace assaults for all industries, with the largest percentage of these occurring in the service industries.

"It does seem to be happening more often," said Donna Bradshaw, Wayne, Pennsylvania-based vice president of independent medical examiner services for the managed care provider Genex Services LLC, confirming that the company has seen the rise in such violence-related claim activity.

Workers comp claims data from multiple sources and Chubb Ltd.'s own claims data show an increase in the frequency of workplace violence incidents in retail between 2013 and 2017, said Stephen Craig, San Francisco-based managing director of Chubb Global Risk Advisers.

Over the same four-year period, comp claims due to workplace violence in retail industries ticked up about 59%, said Gary Anderberg, New Hope, Pennsylvania-based senior vice president of claims analytics at Gallagher Bassett Services Inc., said of the company's data.

"These claims involving workplace violence are costing more, and claims involving workplace violence, in retail specifically, have a significantly higher complexity," he said. "These



claims tend to have higher levels of severity, more medical issues, and often have a mental or emotional component that impact the claim. We see costs going up, both in terms of lost time and medical complexity."

Violence-related claims are "infinitely more complex" than a regular back strain, which is usually an open-and-shut case in which the worker is treated, receives modified duty for a bit and returns to full capacity, said Lev Pabinsky, Philadelphia-based senior director of safety and security for Pepsi-Cola and National Brand Beverages Ltd. and an independent safety consultant.

"With these types of events, once someone is back, if they claim that they are sort of mentally scarred from the event, is that workers compensation? Is it tied into (the Family and Medical Leave Act)? How do we work with human resources? It becomes this energy drain of resources," he said. "We want to do right by the person and get them back to 100%, but resources are finite."

While infrequent, these incidents are "terrible and costly, both for the employer and carrier and for the families affected," said Las Vegas-based Matt Zender, senior vice president of workers compensation strategy at AnTrust Financial Services Inc.

"It's not just the physical injury, but the psychological trauma that they realize can go on for years. It could get into the hundreds of

thousands of dollars. ... It can be very costly," he said.

It's easier to treat a physical ailment, which has an endpoint, Ms. Bradshaw said. A psychological component may include nightmares, flashbacks, and a fear of going back to the workplace, which are often subjective and more difficult to assess, she said.

"An emotional reaction to a workplace event that's violence can actually begin within the first few minutes of an event," Ms. Bradshaw said. "Handling the psych concerns specifically can be more costly just because of the testing and treatment that's associated with it." She noted that testing alone for psychological injuries and impairments can cost more than \$4,500, followed by treatment and return-to-work complications.

Mr. Zender said it's best to try to get in front of violence-related claims, such as by having case management responders trained in handling psychological injuries, who can provide an immediate response.

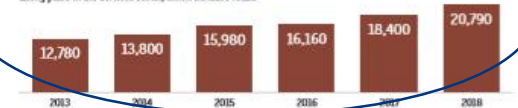
"Depending on the episode, it can be very important to spend a little bit of extra money and have trained individuals come out and sit down with these workers," he said. "I definitely advocate for trying to get in front" of those issues and potential claims.

Ms. Bradshaw also advocates for early intervention, noting that bringing in counselors and psychologists and providing the employees a way to discuss what happened can improve the rate of resolution and help employees get back to work.

"Although case managers and onsite counseling may seem expensive (after an incident), in the long run, those are not only some of the most potentially cost-effective things you can do from a mitigation perspective, but also the most humanistic and moral," said John Dony, Itasca, Illinois-based director of the National Safety Council's Campbell Institute. "It's

#### NONFATAL WORKPLACE ASSAULTS

Reported workplace assaults have been steadily rising, with the highest percentage taking place in the services sector, which includes retail.





# A Problem (An Opportunity)

ctInsider | [More Insider Stories](#)

## Campus sexual assault investigations pose challenges

Justin Papp | Feb. 29, 2020 | Updated



## Manhattan College Students On H

February 21, 2020 at 5:13 pm Filed Under: att



1 of 4

Hannah Lawlor, a Fairfield University junior, c  
in its aftermath, she felt the school did not pr

SCHOOL

## What to Say to Your Daughter About Campus Sexual Assault

It's not what you might imagine.

By NICOLE BEDERA

MARCH 02, 2020 • 5:50 AM



Colleges are being forced to evolve on stemming assault.

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TECH

## Coming Soon to Tinder Dates: Panic Buttons and Safety Check-Ins

Dating app's partner will send police if users feel threatened; company says many are comfortable with the privacy trade-off

*It's a Match!*

You and Amanda have liked each other!



You can now send her a message using your phone.

CONTINUE

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# An IoT Insurance Product Solution

## Combining Safety and Protection

IoT Device

+

Services

+

Insurance



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## Re-Inventing Personal Safety



With a simple press, users can check-in or instantly call for help from anywhere - without needing a phone.



Fully mobile, LTE Enabled IOT Device for two - way communication without a cell phone

- Emergency Notifications
- GPS Location (Data)
- Voice and Data Capture
- Activity tracking (Both Speed and Direction of Travel)

# The Solution Part 2 (The Emergency Services)

**Wearsafe**

**Yellow Alert from Curtis Bankston**  
self, Male  
sent at 12:34 pm, 2/3/20

as of 3 days ago  
**Park St and Pope Park Hwy**  
Hartford, CT 06106 USA  
41.7580089, -72.7015962 Accuracy within 1053ft

0 mph

**CHAT**    **CONTACTS**

- Curtis Bankston, 12:47 pm 02/03/2020
- Curtis Bankston, 12:48 pm 02/03/2020
- Curtis Bankston, 12:48 pm 02/03/2020
- Curtis Bankston, 12:49 pm 02/03/2020
- Curtis Bankston, 12:49 pm 02/03/2020
- Curtis Bankston, 12:49 pm 02/03/2020
- Curtis Bankston, 12:50 pm 02/03/2020

Write a message

## Emergency Response with the Push of a Button:

- Alert Friends and Family Network
- Professional Emergency Call Center
- Audio recording



- Insurance coverage embedded in the IOT device:
  - Accident Medical Expense
  - AD&D
- Download the App = Insurance Enrollment
- Real time Insurance certificate delivery
- Execute at the *Speed of the Internet*

Insurance into an IOT device is a natural product opportunity.

BUT...the insurance user experience **MUST** be on par with the IoT user experience...Digital, Modern, Instant.

# IoT Presents a New Insurance Paradigm

## State legislation is placing a priority on Employee Safety

### New Illinois law requires panic buttons for hotel, casino staff working alone

September 6, 2019 No Comments



CASINO WORKERS HOTEL WORKERS HOUSEKEEPING ILLINOIS WORKPLACE VIOLENCE



Photo: Blair\_witch/istockphoto

Springfield, IL — Beginning July 1, hotels and casinos in Illinois will be required to provide panic buttons for hotel, casino staff working alone.

### New NJ law mandates panic buttons for hotel housekeepers

June 26, 2019 One Comment



HOTEL WORKERS HOUSEKEEPING NEW JERSEY



Photo: Igor Vershinsky/istockphoto

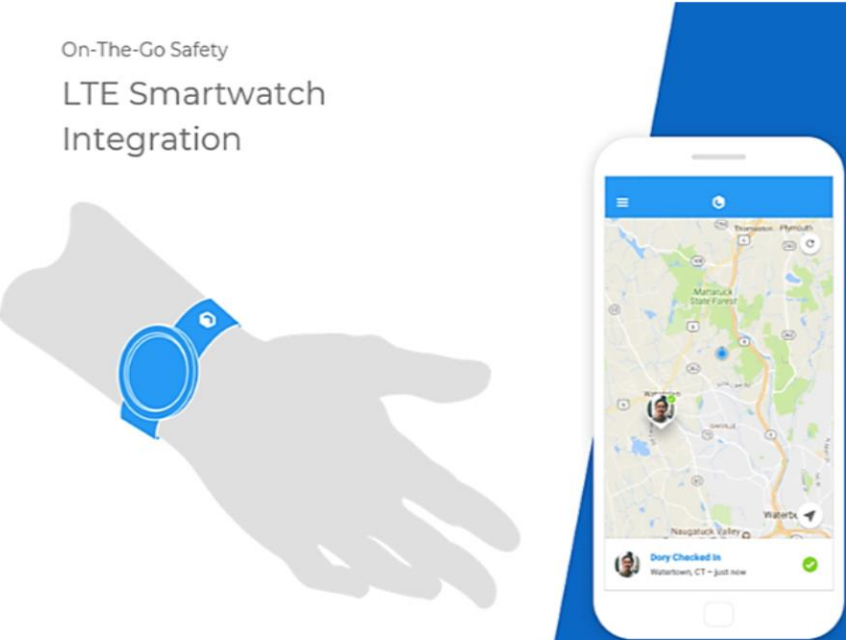
Trenton, NJ — Calling it the first state law of its kind, New Jersey Gov. Phil Murphy (D) on June 11 signed a law mandating that hotels provide panic buttons for housekeepers.

- Cities such as Seattle, Chicago, Miami, and Santa Monica, California, have all passed laws requiring panic buttons for hospitality staff.
- Illinois and NJ have each passed laws requiring hotels to provide panic buttons to housekeepers. **ASRA**

# IoT Presents a New Insurance Paradigm

## Imagining Data Capture & Human Telematics (HT) - Smart Watch Integration

On-The-Go Safety  
LTE Smartwatch  
Integration



**Features:**

- Apple watchOS and Google Wear OS compatible
- Manual alert notification and check-ins
- 24x7 call center integration

wearsafe

- Real time user data = “Human Telematics (HT)”
- Use HT to define coverage – by location, time or activity
- Use HT to refine product offerings and bring new programs to market

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## Imagining Data Capture & Human Telematics (HT) – Geo-Location / Geo-Fencing

**wearsafe**

**Team Locations**

Search... [User: Brian]

- Shannon Hurwitz** 5:39 PM  
Hartford, CT | Location History Available
- Charles Jablonski** 5:39 PM  
Hartford, CT | Location History Available
- Curtis Bankston** 5:39 PM  
Hartford, CT | Location History Available
- Samuel Toman** 5:39 PM  
Hartford, CT | Location History Available
- Jose Parson** 5:39 PM  
Torrington, CT
- James Trudel** 5:39 PM  
Torrington, CT
- Jimmy Chaw** 5:39 PM  
Wethersfield, CT
- David Gore** 5:39 PM  
Colchester, CT
- Elizabeth Jimenez** 5:39 PM

Map | Satellite

Map data ©2020 Google

2019 Moxee Enterprise by devonp

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### Geo- Applications for:

- Family Members
- Employees
- Gig Workers/Contractors
- Assets
- Pets



## Claims Insight

- Capturing data “In the Moment”
- Reduce Claims fraud via GPS
  - Locate people or assets
  - Capture personal activity data
- Timely Reporting = Timely Response
- Claims Transparency



## Risk Mitigation with IoT

- Water sensors
- Temperature devices
- Auto telematics

## New Products

- Usage-Based Insurance (UBI)
  - Auto
  - Occupational Accident
  - Liability
- IOT Embedded Coverages
  - Panic Buttons
  - Smart Watches
  - Asset Trackers
  - Even Bathroom Scales, Toothbrushes and Yoga Mats...



# Closing Thoughts



- The Internet of Things is Here
- Raising the Bar for Insurance
- Opportunities are vast
- Insurance needs a strong digital foundation
- Operate at the Speed of the Internet

# Thank You



@WBrianHarrigan

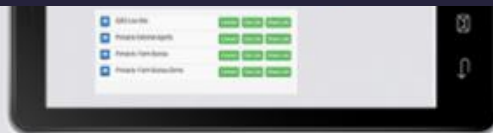
Brian.Harrigan@gboiq.com



Brian Harrigan

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W. Brian Harrigan

March 5, 2020

Brian.Harrigan@GBOIQ.COM

