## The Internet of Things

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TODAY'S TECHNOLOGY advances have greatly impacted not only society in general, but the insurance industry in particular, in areas ranging from underwriting to claims processing. Understanding how technology impacts the insurance industry, and advising clients on how it can affect their insurance coverage and premiums, is another value-added service of the professional insurance agent.

Cyberphysical systems (CPS) are interconnected technologies that include appliances that can be operated from a cell phone, and systems that can diagnose and repair industrial machinery from a remote location. Smart buildings are buildings that run themselves through automated systems. Benefits include increased energy efficiency and extended lifespan of systems, such as heating, air conditioning and lighting, that are turned on only when needed. Increased comfort of a smart building with efficient temperature controls can also lead to greater worker productivity. It is anticipated that the number of smart buildings will triple by the year 2018 (www.octantinnovations.com).

According to the National Fire Protection Association (NFPA), home fires resulted in 2,745 civilian fire deaths in 2014 (www.nfpa.org). CPS can also be used to improve fire detection and protection, as well as fire fighting (www.nist.gov). Smoke and carbon monoxide detectors that are connected to the Internet are now available. They can send a text to the homeowner or business owner if there is a problem and may qualify the building for a higher premium discount than traditional detectors. Historically, fire fighters responding to a call have been at an extreme disadvantage, often without even a floor plan. Access to surveillance cameras can help firefighters locate the source of the fire, as well as any people who may be trapped inside.

Technology tools are also valuable for maintaining records of household contents

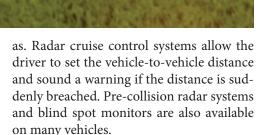
or business inventory. "Nanny cams" and other similar surveillance equipment enables visual inspection of the premises from virtually anywhere in the world.

The National Insti-

tute of Standards and Technology (NIST) is currently researching several aspects of the "smart" trend. These include three areas: smart building technology and robotics, smart fire fighting equipment and technology, and smart fire fighting apparel and equipment (www.nist.gov).

Usage-based insurance (UBI) premiums for auto insurance is another trend that is becoming more common. There are devices that track how far a car is driven, as well as how many times the brake is applied. Excessive braking may be a symptom of tailgating, which may increase accident frequency. Installation of such devices in a car entitles the owner to a premium discount from many insurers. A recent survey by LexisNexis revealed that discounts on deductibles are more attractive to insurance purchasers than premium reductions. According to the survey, 52% of respondents would be more likely to enroll in a UBI arrangement that offered a deductible discount rather than a decrease in premium (www.lexisnexis.com).

Historically, back-up accidents have resulted in 15,000 injuries and 210 deaths per year, of which 31% are children under five years old. In an effort to correct this, back-up cameras will be required equipment on all new cars by 2018 (www.edmunds.com). In 2014, 46% of new cars sold in the United States were equipped with back-up camer-



GPS, social media, and mobile technology all provide enormous benefits, but can also offer great distractions from the safe operation of a vehicle. Technology is meant to be an assistance, not a crutch. The driver is ultimately responsible for the safe operation of the vehicle. Technology must not be allowed to interfere with safe driving. For example, GPS navigators have been blamed for the vast majority of incidents where trucks are too tall for bridges they attempt to pass through (www.consumerreports. org).

Society and technology are rapidly changing, bringing opportunities as well as challenges. It can be a true balancing act to take advantage of the benefits while being aware of potential downsides. Helping clients understand how to best use technology as well as reduce their insurance costs is another sign of the true insurance professional.

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