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Cyber Risks 2020

Technology and automation have soared in all aspects of the professional's work environment, from consumer interaction and marketing, to project delivery, performance, evaluation, and billings. Technology is advancing so quickly that the learning curve will be impossible to overcome, or perhaps technology will replace professionals altogether.

I. Research

Working with technology starts with the research. Research and case studies are available through shared sites, to a point where the consumer becomes an expert. Consumers no longer need licensed professionals to find insurance policies, draft simple contracts, design a structure, or even make repairs to machines, homes or cars. Yet there is still a gap in sharing of big data. Typical issues that relate to data are storage capability, confidential delivery, regulations, and security. This is true in creative industries where professionals are taught to keep their ideas away from competitors. It is also true for industries who represent other parties, as they are required to protect their clients' information.

Gathering information used to involve traveling to the site (accident, project), measuring, taking photos etc. In the online and connected world, there is already abundance of data for us to tap into. Site conditions can be evaluated with great precision where architects, contractors or attorneys can make assessments without ever having to leave their office. This allows companies to take on larger projects, take them abroad and perform in places that might have been logistically unachievable before. Companies can also take on more clients. On the other hand, this will expose licensed professionals to more risks.

II. Mundane Tasks

Technology gives professionals opportunities to automate mundane tasks and free the professional to do more. This has also provided an opening to many software engineers to create tools for the professionals. While certain software is developed by people in their field of practice (e.g., software for accountants, attorneys, contactors), many companies are building on the software they purchase to constantly improve the internal tools of their unique office.

III. Developing Concepts

There is a trend to use game engines to create real life scenarios for studying and for planning. It allows for better coordination and for imagining potential issues to be studied. Software designers can also recognize various regulations so professionals can better assess their risks. The gaming industry

idea of 'augmented reality' can change the perception and engagement of professionals. It would enable people to engage with a design in the area of construction, review themes for jury trials and try them out, or provide appraisers better tools to explain what they see, measure structures more accurately, and predict the outcome of the market.

IV. The Rise of Robots

Technology/machines are being integrated into all industries, offering new and different materials as well as opportunities. Real estate agents can use robots to show homes and interact with their clients, allowing them to show more houses every day, without the inconvenience of traveling in traffic.

Drones are another example of technology that has increased in use in various industries and will likely continue to do so in the foreseeable future. They collect data that was either impossible or difficult to collect before, and they assist in reaching places in record time.

Robots can be in multiple places at the same time, can be available all hours of the day, are able to provide instant verification of information, they save costs in the long run, they are dependable and they can easily compile information and disseminate information and even communicate in any language.

V. Electronic Mail

Using e mails will continue, but their function is changing. With the amount of junk mail and overload, it is difficult to reach people's attention and to get an immediate response like in texts. While it creates a good paper trail, it is also more formal than other forms of communication that have better replaced actual conversation. New forms of communications such as what's up groups are being explored. Another change in the form of communications is the increased use of apps. It provides for an immediate contact and feedback, 24/7 direct contact, easy access to additional related information such as, photos, appointments, data, etc.

VI. Changes Created by Technology

Each profession has had its share of changes. In construction, one of the changes brought by technology is using more design-built projects. Design built is a single entity delivery where on various the design and construction services are contracted to a single entity. The design-builder controls both the design and construction processes from the beginning of preparation of the design documents through final acceptance of the project.

In the real estate space, companies were created that provide technology rather than a physical product. Venture capital and startups are common place. Behemoth investors like, Paypal, YouTube, Tesla Motors, LinkedIn, Yelp, and Facebook, have launched many real estate sites for investors. This also leads to consolidation of businesses and elimination of mom-and-pop businesses.

Other examples of technology changes are virtual companies. In the real estate industry we see more virtual agents/escrow. In the law practice we see virtual assist, which is a software that responds to a pre-determined list of questions on various legal topics.

VII. E Commerce

E commerce is now common place and it becomes more and more invasive by the use of cookies. When a buyer sees something he/she likes on a website it drops a tiny file called a "pixel" that identifies the buyer. Then, the program continues to learn more about the buyer's behavior and

matches the buyer to a product, which it then sends to the buyer. This creates compulsive buying, but it also increases competition for pricing.

VIII. Risks

There are many risks associated with technology. They include, the use of massive data, some of which is redundant, a lot of which is private. The data is also being recorded (Alexa, photos, cookies) and it can create a record that will be impossible to expunge. The tort of intrusion “encompasses unconsented-to physical intrusion into the home, hospital room or other place the privacy of which is legally recognized, as well as unwarranted sensory intrusions such as eavesdropping, wiretapping, and visual or photographic spying.” *Shulman v. Group W Productions, Inc.* (1998) 18 Cal.4th 200, 230

Currently, all the legislation around technology is concerned with data privacy and autonomous vehicles. The idea of “adaptive regulation” has been explored, but technology is proceeding in a much faster pace than our legislature can work.

There is Web Content Accessibility Guidelines (WCAG) developed, to create a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally. American with Disabilities Act (ADA) has impacted the use of website by requiring websites to be accessible to the deaf and the blind, and copyright lawsuits are being filed when it appears that certain pictures, phrases or music go on-line and then are reproduced.

There are also concerns of intellectual property, copyright, and patent issues when developing technology. The Copyright Act - 17 U.S.C.S. ' 102(a) lists eight categories of "works of authorship" covered by the Act.

Cyber claims were initially the main risks associated with new technology, and they have gained popularity. They include, gaining unauthorized access to a computer system or its data, theft and fraud, disruption such as, taking down of entire web sites or access, demand for ransom, and installation of viruses or malicious code. [*Bain v. Platinum Realty, LLC* (Case No. 16-2326-JWL (D. Kan. Jun. 25, 2018). Buyer alleged that listing agent emailed the fake wiring instructions to him, thereby misrepresenting that those instructions were correct]. The more we rely on technology and connect all our devices, home security, even smart refrigerators and coffee makers, the more these machines know about our habits and the more exposed we are to theft/fraud. Developers have been using game theory to develop algorithms about strategic defense from cyber attacks. The U.S. National Institute of Standards and Technology created standards for cryptography.

IX. The Future

The insurance industry is always behind the curb. Various types of insurance products are available but they vary significantly and the risk is unknown. There is also exposure to coverage in policies that are more general.

Overall, the standard of care in how we advise our clients is changing. Competition with big investors is impossible, the relationships and service are no longer personal and our reliance on technology is sometimes too risky.