

The Business
of InsuranceBy Elizabeth J. Bondurant
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As the industry moves forward, it should consider both the immediate and long-term implications of its use of accelerated underwriting practices.

The Evolving Impact of Accelerated Underwriting and Insuretech

In recent years, the life insurance industry has greatly enhanced the speed and efficiency of its underwriting decisions. This change in the underwriting process is due in large part to the use of new technology in data collection

and risk assessment. As the utilization of such technology expands, the changes within the industry will accelerate at an even faster rate—potentially before the industry is able to determine whether these changes are ultimately beneficial. Accordingly, the insurance industry should analyze the potential benefits and drawbacks of new technology used to increase underwriting efficiency while adaptive measures are still possible. This analysis should consider both the immediate practical concerns of implementing this technology and the larger effect such technology will have on the industry at large.

This article addresses the general concepts involved with the utilization of new technology within the insurance industry. As this new technology is highly technical and evolving quickly, this article is not intended to be an exhaustive discussion

of the legal issues implicated by the use of such technology. Practitioners should therefore consult the insurance regulations and litigation procedures followed in the locations where they practice in conjunction with litigating any of the issues addressed in this article.

General Background

Move Towards Accelerated Underwriting

The underwriting of life insurance policies requires insurers to gather extensive information on applicants to determine their individual mortality risks. *See* Noorhannah Boodhun & Manoj Jayabalan, *Risk prediction in life insurance industry using supervised learning algorithms*, 4 *Complex & Intelligent Systems* 145, 146 (2018). Such a nebulous concept requires the analysis of personalized information, including an individual applicant's medical background,



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family history, driving records, and general lifestyle activities. See Daniel Kurt, 7 *Factors That Affect Your Life Insurance Quote*, INVESTOPEDIA (last updated Oct. 9, 2018). The accumulation of this information has traditionally been a lengthy process, requiring applicants to undergo several medical evaluations and to procure and submit a significant amount of documenta-

determinations on underwriting offers through the use of new data tools and modeling techniques. *Id.*; Iacurci, *supra*. This is accomplished through the utilization of certain digital technology and artificial intelligence known as “insuretech.” Patrick Wraight, *A Quick (No Really, Super Quick) Insuretech Primer*, Insurance Journal (June 13, 2018).

smart contracts written in code to change in conjunction with any change in the insured’s risk profile or health status. See Lewis, *supra*, at 496.

The use of insuretech expands beyond mere data collection, however, by additionally providing statistical algorithms and rules engines to assist in underwriting decisions. See Iacurci, *supra*. This benefit is obtained through the use of a form of artificial intelligence known as “machine learning systems.” See Lewis, *supra*, at 494. This form of artificial intelligence creates analytical models from obtained applicant data to identify norms of human behavior and find risk-correlating patterns. *Id.* Machine learning systems use these norms to determine mortality risks that may otherwise be undetected by human underwriters. *Id.* Moreover, machine learning systems use collected data to calculate effectively an insurance applicant’s “customer lifetime value,” which is a metric that formulates the difference between the revenue an insurer is likely to gain from an applicant and the insurer’s expenditures over the lifetime of the insurance relationship. See Mateusz Hapon, *6 Ways Machine Learning Is Changing Insurance*, Netguru (Dec. 13, 2018).

Insuretech includes

“smartphone apps, consumer activity wearables, claim acceleration tools, individual consumer risk development systems, online policy handling, [and] automated compliance processing.”

tion. See Boodhun & Jayabalan, *supra*, at 146. This underwriting process often led to general customer dissatisfaction and a decrease in the overall sale of life insurance policies. *Id.* As a result, “[f]ewer than half of people in the United States aged twenty-five to sixty-four have life insurance coverage.” Sam Lewis, Student Author, *Insuretech: An Industry Ripe for Disruption*, 1 Geo. L. Tech. Rev. 491, 491 (2017).

To combat these issues, the life insurance industry has started taking steps to improve underwriting speed and efficiency. See Greg Iacurci, *Technology is streamlining the process of issuing life insurance policies*, InvestmentNews (Jan. 10, 2018, 2:37 PM). Most notably, the industry has implemented *accelerated* underwriting, which can eliminate the use of paramedical exams and laboratory testing in underwriting decisions. See Dianne Schuetz, et al., *Busted: Top Five Myths About Accelerated Underwriting*, 34 On The Risk 32, 32 (2018). Rather than rely on medical tests, accelerating underwriting facilitates faster

Insuretech Utilized in Accelerated Underwriting

Insuretech encompasses all technological advancements that are implemented to generate efficiencies in the insurance industry. *Id.* Thus, insuretech includes “smartphone apps, consumer activity wearables, claim acceleration tools, individual consumer risk development systems, online policy handling, [and] automated compliance processing.” Ben Deda, *What Is InsurTech and How Can You Harness Its Disruptive Powers?*, Vertafore (Sept. 20, 2017). Social media is also considered to be a subset of insuretech, as it provides information on an applicant’s interests and general lifestyle activities. See Lewis, *supra*, at 495. Beyond actual software products, the term insuretech also encompasses start-up companies creating technological advancements in the insurance industry. See Wraight, *supra*. These companies focus mainly on the distribution channel to create efficiencies in the insurance purchasing process. *Id.*

A significant asset of insuretech is the innovative and efficient way it accumulates relevant information on a life insurance applicant. Specifically, activity wearables, also referred to as “Internet of Things” devices, collect information on physical activity, heart rate, and personal habits. See Lewis, *supra*, at 493. In addition, insuretech allows insurers to gather consumer data such as prescription medications, credit history, and motor-vehicle information quickly from third-party sources. See Iacurci, *supra*. Insuretech is also used to obtain an applicant’s purchase history, as well as collect behavioral data through cell phone usage and social media activity. See Tyler Tappendorf, *Five InsureTech Trends and What They Mean for Microinsurance*, FinDev Gateway (Feb. 2017). This ability to receive a constant stream of data facilitates “continuous underwriting,” which allows for

Perceived Benefits and Potential Drawbacks of Accelerated Underwriting

As accelerated underwriting practices have only recently begun to develop, their full impact on the insurance industry has not been determined. Nevertheless, some general benefits and perceived drawbacks on the current implementation of accelerated underwriting through the use of insuretech have begun to emerge.

Perceived Benefits Speed

At bottom, accelerated underwriting is used for the purpose of increasing the speed of underwriting decisions. See Iacurci, *supra*. This increased speed is created by insuretech gathering personal and behavioral data on applicants almost instantaneously through third-party sources. *Id.*; Tappendorf, *supra*. In addition, insuretech’s ability to obtain an applicant’s medical data alleviates the need for an applicant to complete a medical exam for an insurer, which was generally the

most time-intensive aspect in traditional underwriting practices. *See* Iacurci, *supra*. Machine learning systems can also generally make quicker risk assessments through the use of statistical algorithms and rules engines, thereby moving claims through the system at a faster pace. *Id.*; Hapon, *supra*. The digitization of the application process through insuretech has also made the application process much faster for applicants to complete. *See* Iacurci, *supra*. These cumulative attributes of insuretech may ultimately allow for underwriting decisions to be accomplished in a matter of minutes. *See* Melissa M. D'Aleleo & Taylore Karpa Schollard, **Colossus and Xactimate: A Tale of Two AI Insurance Software Programs**, A.B.A. (Feb. 7, 2020).

Cost Reduction

The increased operational speed resulting from the use of insuretech has also reduced the costs generally associated with insurance underwriting. *See* Timothy L. Rozar, **Life Insurance in a Time of Rapid Technological Change**, RGA (Apr. 1, 2015). This cost reduction occurs by insuretech either automating or outright eliminating certain routine manual tasks. *Id.* In addition, insuretech has reduced costs through more efficient data collection, eliminating time intensive and expensive efforts on the part of human underwriters to acquire the information necessary for underwriting decisions. *Id.*

Younger Applicants

Accelerated underwriting is viewed as more likely to appeal to younger generations, most notably millennials. *See* Thiru Sivasubramanian, **How Insuretech Can Help Millennials Buy Life Insurance**, Forbes (Nov. 20, 2018 8:15 AM). Younger generations are viewed as more likely to seek out life insurance if the application process is streamlined through digital applications. *Id.* Additionally, accelerated underwriting can potentially offer younger applicants more personalized insurance plans that allow for lower premium payments. *Id.*; Rozar, *supra*. This is particularly important for younger applicants who may otherwise be unwilling to take on the costs of a life insurance policy due to increasingly higher student loan debts and other financial obligations. *See* Sivasubramanian, *supra*.

Bias Removal

The reliance on insuretech in accelerated underwriting may eliminate bias that is potentially present in human underwriting. *See* Lewis, *supra*, at 494. Such bias removal would occur through underwriting determinations made pursuant to statistical algorithms and rules engines rather than subjective evaluations of certain risk factors. *Id.*

However, while seemingly eliminating bias through the removal of subjective underwriting determinations, bias may potentially be present in certain algorithms used by insuretech. Specifically, insuretech may evaluate certain variables such as socio-economic status, educational attainment, genetic predisposition to diseases, credit history, and living areas that may have a discriminatory effect on certain classes of insurance applicants. *Id.* at 496; NY Circular Letter No. 2019-1 (Jan. 18, 2019), 2019 WL 271541 at *2–4. Moreover, human intervention will still likely be necessary to monitor and revise the rules running utilized insuretech. *See* Susanne Sclafane, **Tasks Done by Agents, Underwriters, CEOs Can Be Automated: McKInsey**, Carrier Management (Dec. 21, 2015). This presents the possibility that subjective human biases may be implemented into algorithms utilized for underwriting decisions.

Potential Drawbacks

Regulation Barriers

Unlike most industries, the insurance industry is mostly regulated by state law. *See* Lewis, *supra*, at 498. As a result, producers and users of insuretech will have a difficult time creating nationwide underwriting practices. *Id.* This is particularly true in the context of the procurement of genetic data, the regulation of which varies greatly from state to state. *See* Lawrence O. Gostin & James G. Hodge, Jr., **Genetic Privacy and the Law: An End to Genetics Exceptionalism**, 40 *Jurimetrics* J. 21, 22 (1999). Moreover, the ongoing issue of compliance will create significant costs and time-consuming efforts for producers of insuretech, particularly for startup companies. *See* Lewis, *supra*, at 498. As a result, it is unclear whether nationwide implementation of insuretech is practically and financially feasible.

Potential Fraud

The increased digitalization of insurance applications makes insurers more susceptible to fraudulent procurements of insurance. *See* **Fighting Insurance Application Fraud**, SAS (last visited Apr. 14, 2019). This is true because potential fraudsters have anonymity in the increasingly digitized insurance application process, and are also able to obtain personal information of other individuals through the same methods used by insuretech. *Id.* In addition, the lack of human interaction makes it harder for insurers to verify the identity of applicants and the risks they are looking to underwrite. *Id.*

Despite these concerns, there is also a belief that insuretech can actually be used to prevent fraud. *See* Lewis, *supra*, at 497; Hapon, *supra*; Rozar, *supra*. This is true because insuretech may be able to create and use fraud-detection models such as natural language processing programs that determine truthful expressions through analysis of normal speech patterns. *See* Lewis, *supra*, at 497. These models may also be able to spot potential fraud much faster than human underwriters, allowing insurers to take quicker steps to eliminate fraudulent activities. *See* Hapon, *supra*.

Lack of Transparency

Using complex statistical algorithms makes it difficult for both consumers and insurance regulators to understand *how* a machine learning system reaches a particular result. *See* Anand Rao & Ilana Golbin, **Opening the black box with explainable ai** (Aug. 13, 2018). This issue is often referred to as the “black box” problem, wherein a system can only be viewed in terms of its inputs and outputs but not by its internal workings. *See* Dallas Card, **The “black box” metaphor in machine learning** (July 5, 2017). It is therefore difficult for customers and insurance regulators to decipher why certain medical data or personal information led to the underwriting recommendation provided by a machine learning system. *Id.*

Data Security/Privacy

The increased access to personal data through insuretech creates privacy concerns for insurers. *See* Rozar, *supra*. This is particularly true because such privacy regulations are generally regulated by

state law, Lewis, *supra*, at 498, making it difficult—if not impossible—for insurers to establish nationwide privacy practices. In addition, insurers will likely have significant expenditures to protect against insureds’ private information being improperly revealed or otherwise obtained through third-party hacking practices.

An insurer’s ability

to know what additional factual inquiries should be made is limited in the “one size fits all” approach of insuretech data collection.

Current Issues with the Utilization of Accelerated Underwriting

The practical application of accelerated underwriting is the most immediate concern to insurers. This is particularly true in the context of post-claim underwriting and the reliance on e-signatures.

Post-claim Underwriting

Post-claim underwriting occurs when an insurer waits until after a claim is made to determine whether the claimant/beneficiary is eligible for the insurance coverage previously provided. *Lewis v. Equity Nat’l Life Ins. Co.*, 637 So.2d 183, 186 (Miss. 1994). This practice is generally criticized as an improper delegation of the insurer’s obligation to perform thorough underwriting investigations during the initial application process. **How to Recognize Post-Claim Underwriting** (last visited Apr. 14, 2019). Put simply, the practice of post-claim underwriting is viewed by some as a means for insurers to rescind policies that were knowingly issued without sufficient investigation for the purpose of collecting immediate profits on premium payments. **Post-Claim Underwriting: How Insurance Companies Plan Not to Pay You**, Dolman Law Group (July 28, 2017). As a result, many states prohibit

post-claim underwriting practices. *See, e.g.*, 28 Tex. Admin. Code §3.3823; *White v. Cont’l Gen. Ins. Co.*, 831 F. Supp. 1545, 1562 (D. Wyo. 1993); 31 Pa. Code §89a.110.

Nevertheless, as an exception to this general restriction, post-claim underwriting is typically allowed when a material misrepresentation is made by an applicant during the application process. *See* N.Y. INS §3105(b) (1). This is particularly true in the context of life insurance policies “in the event that a policy holder dies within their life insurance policy’s contestable period.” *Tran v. Kansas City Life Ins. Co.*, 228 F. Supp. 3d 1068, 1078 (C.D. Cal. 2017). This exception is justified on the basis that a death within the contestable period of an insurance policy creates a reasonable suspicion that a misrepresentation was made during the application process. *See Yang v. Peoples Benefit Ins. Co.*, No. CIV F 06-458 AWI DLB, 2007 WL 1555749, at *2 (E.D. Cal. 2007). Thus, a life insurance policy may generally be rescinded when 1) the applicant made a misrepresentation during the application process; 2) the misrepresentation was material; and 3) the applicant was aware he or she made a misrepresentation. *Tran*, 228 F. Supp. 3d at 1074; N.Y. Ins. §3105(b)(1).

Going forward, however, it may be more difficult to determine when a misrepresentation sufficient to rescind a life insurance policy is made in the context of the accelerated underwriting process. This is true because of the dueling principles that determine whether rescission on the basis of applicant misrepresentations is justified. The first of these principles is that insurers are generally able to “rely upon the insured to provide such information as it needs to determine whether to provide coverage.” *Bhakta v. Hartford Life & Annuity Ins. Co.*, 673 F. App’x 762, 764 (9th Cir. 2016). In essence, this principle is that life insurance applicants must fully disclose all necessary information at the inception of the application process. *Id.* With accelerated underwriting, however, insurers are able to accumulate personal data on applicants independently, thereby cutting down the number of questions asked of applicants during the application process. *See Iacurci, supra*. As a result, it will be more difficult to discern when an insured had knowledge of a “misrepresentation” made during the application process that impacted the issuance decision.

The second principle is that an insurer’s right to material facts may be waived “by neglect to make inquiries as to such facts, where they are distinctly implied in other facts of which information is communicated.” *Bhakta*, 673 at 764 (quoting Cal. Ins. Code §336). Of course, by outsourcing applicant data collection to insuretech, insurers are less involved in the initial application process, thereby providing less opportunity to make additional inquiries of the applicant. Put simply, an insurer’s ability to know what additional factual inquiries should be made is limited in the “one size fits all” approach of insuretech data collection. *See Schuetz, et al, supra*, at 34. It is therefore unclear what investigative burdens will be placed on insurers who rely on insuretech to obtain the bulk of the information necessary for underwriting decisions.

Reliance on E-Signatures General Benefits and Concerns of E-Signatures

Insurers are more reliant on e-signatures in accelerated underwriting practices that utilize digitized insurance applications and smart contracts. This reliance on e-signatures is generally viewed as a positive, as it allows insurers to reduce cycle times. *See Hapon, supra*. In addition, by eliminating the need for clients to sign contracts in person, smart contracts allow insurers to engage in continuous underwriting. *See Lewis, supra*, at 496–97. This is true because insureds can sign automatically when changes are made to their insurance policies, thereby making such changes effective almost instantaneously. *Id.* at 497.

Despite these benefits, however, the increased use of e-signatures has also created practical concerns for insurers; most notably, by leaving insurers more susceptible to fraud in the insurance application process. *See Fighting Insurance Application Fraud*, SAS, *supra*. This increased risk is due to fraudsters relying on the anonymity achievable through e-signature authorizations. *Id.* Fraudsters can therefore potentially commit the following acts through the use of e-signatures: 1) obtain insurance policies for fictitious beneficiaries; 2) open and subsequently cancel an insurance policy for the benefit of an insurance agent; and 3) modify insurance information in order to reduce premium payments owed thereunder. *Id.*

Legal and Practical Concerns on E-Signature Verification

Going forward, the insurance industry will need to determine the best practices for preventing fraud through the utilization of e-signatures. This is most likely achieved through authentication processes that confirm the identity of a party signing a document through an e-signature. *Id.* This may prove difficult, however, because the laws addressing the level of authentication necessary to validate an e-signature differs between states. *See* Maureen Mineham, *Are your e-signatures enforceable?*, 311 Employment Law Counselor NL 1, 1 (2016). These differing standards will likely make it difficult for insurers to create a nationwide authentication process for e-signatures.

Beyond the legal issues, there are also practical considerations that insurers must contemplate when addressing this issue of authentication. Specifically, insurers could implement additional digital devices that help identify applicants and insureds utilizing e-signatures through multiple data sources. In addition, insurers could require applicants and insureds to go through more extensive verification processes, such as providing multiple forms of personal identifying information like checking account numbers and social security numbers. *See* Dawn Lewallen, *Technology: Legal Considerations in Electronic Signature Integrity*, Advanced Real Est. Drafting 9.IV (2018). These numbers can then be analyzed by insurtech to ensure they match records from credit bureaus and other information sources. *See Fighting Insurance Application Fraud*, SAS, *supra*. Of course, such practices may ultimately eliminate the efficiency and client convenience that accelerated underwriting is designed to facilitate. Additionally, a more extensive authentication process may create client mistrust on whether information provided to insurers is adequately protected. *See Rozar, supra*.

Overarching Industry Concerns Presented by Accelerated Underwriting

Beyond the immediate practical concerns, the implementation of accelerated underwriting creates broader issues that the

industry should be cognizant of going forward. One such issue is the overarching impact accelerated underwriting and the implementation of insurtech will have on the insurance job market. In addition, the use of accelerated underwriting may have a significant effect on the formation and sustainability of risk pools generally used in insurance underwriting. These issues should be a key concern to the industry going forward, as they will ultimately affect the overall viability of the insurance industry.

Accelerated Underwriting's Effect on the Insurance Industry Job Market Potential Risk of Job Reduction and Job Loss

A study performed by CareerCast.com in 2015 determined that insurance underwriters were “No. 9 of 10 endangered jobs.” *See* D’Alelio & Schollard, *supra*. This determination was made on the basis that “[s]treamlined processes allow agents to take on the work previously handled by underwriters.” *Id.* Consistent with this determination, the U.S. Bureau of Labor Statistics has projected that between 2012 and 2022 underwriting jobs throughout all industries will shrink from 106,300 to 99,800. *See* John Najarian, *Is Automation Going to Put an End to the Underwriting Profession*, Genre (Dec. 13, 2015).

Undoubtedly, the rise in insurance underwriter job tasks that can potentially be automated is the result of the creation and use of insurtech. Nevertheless, there is still a general consensus that human underwriters cannot be replaced completely by artificial intelligence, particularly in more complex cases. *See* Schuetz, et al, *supra*, at 34; *See* Jared Shelly, *Here's How Artificial Intelligence Is Poised to Transform Insurance Underwriting for the Better*, Risk & Insurance (Jan. 28, 2019). Moreover, underwriters will still likely be needed to monitor and revise the rules running utilized insurtech. *See* Sclafane, *supra*. While this need for human reasoning is acknowledged despite the use of insurtech, it remains unclear the exact role human underwriters will have as the insurance industry expands its use of insurtech. *See* Shelly, *supra*.

Ideally, insurtech will merely augment human capabilities, allowing human

underwriters to work alongside artificial intelligence to further enhance the underwriting process. Schuetz, et al, *supra*, at 34. This is particularly true given the fact that it is still considered unlikely a single artificial intelligence could fully underwrite facultative insurance applications. *See* Dihui Lai, *Wired to Underwrite: Artificial Intelligence and Underwriting*, RGA (Oct. 30, 2018). Thus, the job duties of a human underwriter may change towards the use of skill sets that incorporate or otherwise augment the performance of insurtech in the underwriting process. *Id.* What these job duties will be, however, as well as how these new job duties will change insurance underwriters day-to-day workflow—and by extension their net income—remains undetermined.

Potential Liability Issues Created by the Use of Insurtech

In considering what role insurtech will play in the underwriting process, it is important to be mindful of the potential liability issues that may result from the use of insurtech. Specifically, liability issues could arise in the event underwriting determinations are made pursuant to statistical algorithms used by insurtech that are deemed to be incorrect, defective, or otherwise discriminatory. Liability issues may also arise if data collection techniques performed by insurtech are deemed to violate either applicable privacy laws or state insurance regulations. *See* D’Alelio & Schollard, *supra*. At the moment, there is very little regulation on the use of artificial intelligence in general, let alone in the insurance industry. *See* Alexandra M. Jones, Student Author, *Old Days Are Dead and Gone: Estate Planning Must Keep Its Head Above Water with the Changing Tide of Technology*, 11 Est. Plan. & Community Prop. L. J. 161, 180 (2018). As a result, it is unclear “who is liable for artificial intelligence mistakes.” *Id.* at 162. This lack of regulation creates undetermined legal risks to insurance companies that use insurtech. Specifically, it is unclear whether the provider of insurtech would be wholly liable for the mistakes or malfunctions of its offered products, or if insurers would be subject



to liability for their reliance on such technology. *See* D'Alelio & Schollard, *supra*. It is also unclear what responsibilities a user of insurtech will have to ensure the accuracy and proper functionality of its utilized software. *Id.* Compounding these issues is the concern that artificial intelligence may be a “legal person” capable of being sued. *Id.* at 167. This scenario would potentially make a user of artificial intelligence jointly and severally liable for the mistakes of such technology under principles of agency law.

These issues of insurer liability are enhanced when a human underwriter works alongside insurtech. Insurance underwriters are undoubtedly employees of insurance companies. *See Agency Solutions.Com, LLC v. TriZetto Grp., Inc.*, 819 F. Supp. 2d 1001, 1021 (E.D. Cal. 2011). Insurance companies are therefore liable for the acts of underwriters performed within the scope of their employment. *See* 1 American Law of Torts §4:3. As a result, life insurance companies generally implement rules that help “their agents and underwriters determine which applicants to accept and which to reject.” Brian J. Glenn, *The Shifting Rhetoric of Insurance Denial*, 34 Law & Soc’y Rev. 779, 787 (2000). Such rules are not as well defined, however, with respect to reliance on insurtech. Therefore, from a liability standpoint, it is unclear how much an insurance underwriter can rely on insurtech “within the scope of employment.” This lack of guidance on the interplay between human underwriters and insurtech could create issues if underwriters merely follow the recommendations of algorithms and/or data collections provided by insurtech that are determined to be faulty or have a discriminatory effect. Conversely, however, liability issues may also arise if an underwriter deviates from an insurtech recommendation, as such a deviation could be used as evidence that the underwriting decision was the result of improper bias. This result would effectively disincentivize the use of human intervention in the underwriting process, thereby making the role of human underwriters more vulnerable to reduction. Until these issues of liability are resolved, it is unclear what the full legal effect of the use of insurtech will be.

Accelerated Underwriting’s Effect on Risk Pools

Potential Reduction of Risk Pools

“Risk pooling” is the traditional underwriting system utilized by insurance companies. *See* Lewis, *supra*, at 495. Under this system, insurers produce an approximate risk profile for each insurance applicant. *Id.* Insurance companies then group the individual applicants into risk pools where premium payments are grouped together, effectively mitigating the risk of miscalculations or inaccuracies in the underwriting process equitably across the entire pool. *Id.*; Kyle McDonald, *The Life Insurance Risk Pool-Part I*, Pivot (last visited Apr. 14, 2019). This practice allows insurers to accept similar infrequent risks from a significant number of applicants, thereby reducing its overall financial risk in the event a claim must be paid. *See* McDonald, *supra*.

The use of accelerated underwriting through insurtech, however, may lead to the reduction of the use of risk pools, or otherwise reduce the size of utilized risk pools, in favor of more personalized insurance policies. *See* Lewis, *supra*, at 495. This is true because data obtained from wearable devices, smartphones, and social media accounts allow insurers to obtain more individualized data for each applicant. *Id.*; Hapon, *supra*. Moreover, machine learning systems allow insurers to create more personalized insurance experiences through the use of calculations on behavioral trends unique to each individual applicant. *See* Lewis, *supra*, at 495; Hapon, *supra*. This information will potentially allow insurers to evaluate an applicant’s risks, and by extension their corresponding premium charges, more accurately. *See* Lewis, *supra*, at 495. This will effectively minimize the need for one insurer to subsidize the insurance of another. *Id.* at 495–96. Such a result will ultimately reduce the size of risk pools, if not eliminate them entirely. *Id.*

Potential Drawbacks of Personalized Insurance Plans

In many areas of the insurance industry, more personalized insurance plans are seen as a benefit to insurance applicants. *See* Hapon, *supra*; Sivasubramanian, *supra*. This viewpoint may be

shortsighted, however, as more personalized insurance plans may “also create corresponding harms to customers.” *See* Lewis, *supra*, at 496. Specifically, individuals with distinct health risks that would otherwise struggle to obtain insurance benefit from the use of large risk pools. *Id.* This is true because an insurer’s risk in insuring such individuals is reduced in a large risk pool that encompasses many individuals with far fewer insurance risks. *Id.* As a result, individuals “with high risk factors that normally would balance out as part of a risk pool may instead lose their subsidy.” *Id.*

Even if they are not denied insurance, applicants can be harmed by the reduction of risk pools through significantly higher premium payments. *Id.* Through the underwriting process, an insured’s insurance premium is determined based on his or her mortality risks in comparison to the risks of the average insured party. *Id.* at 495–96. Obviously, therefore, an individual with higher mortality risks generally pays a higher premium for life insurance. *See* Mila Araujo, *What Is Insurance Underwriting? Insurance Underwriting Explained*, The Balance (last updated Mar. 12, 2019). Such premiums of high risk individuals are still able to be reasonably affordable, however, when they are placed in a large risk pool with a significant number of individuals with low premiums. *See* McDonald, *supra*. If such high risk pools are eliminated or substantially reduced, no such offset is possible. *See* Lewis, *supra*, at 496. As a result, the premiums charged to high risk individuals will rise significantly. *Id.* Such a rise in premiums could effectively price out high risk individuals from obtaining insurance.

Conclusion

The overall effect of accelerated underwriting and the utilization of insurtech on the life insurance industry is unknown. As the industry moves forward, it should consider both the immediate and long-term implications of its use of accelerated underwriting practices. Proper assessment of these issues will allow the industry to determine the ultimate benefits of accelerated underwriting, as well as the most effective use of insurtech in the improvement of underwriting practices in general. 