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THE FUTURE OF INSURANCE TECHNOLOGY

EMBRACING INNOVATION FOR A DIGITAL INSURANCE REVOLUTION

SOLSTICE INNOVATIONS, INC.

CONTENTS

INTRODUCTION

Insurtech is the merging of technology and insurance processes. It has long made many promises, some of which have been delivered, others have yet to be fulfilled, and many have fallen by the wayside, turning out to be little more than hype. But technological advancements are revolutionizing the insurance industry, from how consumers think about insurance to how it is sold, underwritten, and reinsured. The entire journey is experiencing innovation in some, often many, and simultaneous ways at an ever-increasing rate. Navigating through the noise is a tremendous challenge.

This document looks further into the revolution, asking, "How do you embrace it?"

The Evolution of Insurance Technology

1 Mid 20th Century

Mainframe computers introduced better access to data, automation of routine tasks, and improved regulatory compliance.

Late 20th Century 2

Geospatial technology improved risk assessment, claims management and portfolio optimization.

3 Early 21st Century

Tech platforms provided CRM systems, policy admin systems and BI tools.

2010s 4

Cloud computing and big data analytics as well as the emergence of Insuretech enahnced efficiency and customer engagement.

5 Now and Future

AI, personalized insurance and cusomer-centric models will drive operational efficiency and immprove the customer experience.

A TIMELINE OF INSURANCE TECHNOLOGY INNOVATIONS

Ironically, Property & Casualty (P&C) insurance was one of the first commercial industries to embrace early technology beginning around the middle of the 20th century with the introduction of mainframe computers. In the late 20th century, advancements, such as geospatial technology, enabled better risk assessment, disaster modeling, and property valuation. Additionally, base technology architecture and enhanced software development tools (i.e., Microsoft and Java 'tech stacks') gave rise to new, non-mainframe-based platforms.

Online platforms emerged in the early 21st century, enabling self-service and increasing customer interaction. By the 2010s, data analytics and predictive modeling enabled improved underwriting, claims forecasting, and fraud detection, while mobile apps further enhanced the customer experience.

Blockchain was a topic in every insurance company's boardroom in the mid-to-latter part of the 2010s, with little understanding of its efficacy or real-world application and limited delivery of its promise. Artificial Intelligence (AI) and personalized products are currently at the forefront with more real promise than some of the other tech trends. They enable a more customer-centric focus, greater process automation, chatbots, improved claims management, and smart contracts to reduce paperwork and improve processing time. The business gains expected from these advancements include cost reduction and improved customer engagement.

The evolution of technology within insurance parallels advancements in many unrelated industries - and aspects of life in general - even though insurance companies have a reputation for moving less quickly than other industries.

And as other industries move more quickly, insurance customer expectations rise, forcing insurance companies to increase their pace of change.

For example, as dramatically different as they are, you can compare the evolution of insurance technology to the evolution of home meal preparation. In the early 20th century, meal preparation was very manual and time-consuming. Ingredients were sourced from local markets, and meals were cooked in the kitchen, following tried-and-true family and regional recipes. Insurance processes during the same period were also very manual, with technology limited to pen, paper, and cash payments.

By the mid and late 20th century, large grocery retailers, canned goods, frozen foods, electric appliances, and an abundance of cookbooks expanded and modernized how (and what) home-cooked meals were prepared, reducing the risk of the home cook's inability to source ingredients and potential to produce unappealing meals. Meanwhile, larger insurance companies (and consolidation) took root, partly enabled by advancements in technology, such as mainframe computers that automated some of the manual efforts.

By the early 21st century, meal kit delivery services emerged, providing everything home cooks needed to learn how to cook without having to shop for or measure ingredients to prepare perfectly portioned meals. Insurance technology evolved to include apps and other technology, making it easier for the customer to become more insurance knowledgeable and engage in ways that had not previously been available, such as through self-service.

The next trend, using advanced AI, will be the availability of more personalized meal kits and recipes and the expanded use of smart appliances. Perhaps one day, we will speak to a device that produces the ingredients and prepares the meal on demand. Meanwhile, insurance technology is also trending further into AI and toward more personalized insurance.

The trend is the same for each of these two very different industries and is, in fact, the same for most industries. It should be viewed less as "How has technology evolved in my industry" and more as "How has my industry evolved as a result of technology, and how can it evolve further?"

When viewed this way, the evolution is expressed as follows:

- Manual processes have evolved into automated processes
- Automated processes have evolved into self-service options
- Self-service options are evolving into personalized products

All of the above is evolving through technological advancements, like AI, which will ultimately deliver product options or solutions we did not have to seek, find, or procure for ourselves (pre-determined goods and services).

Manual → Automated → Self-Serviced → Personalized → Pre-Determined
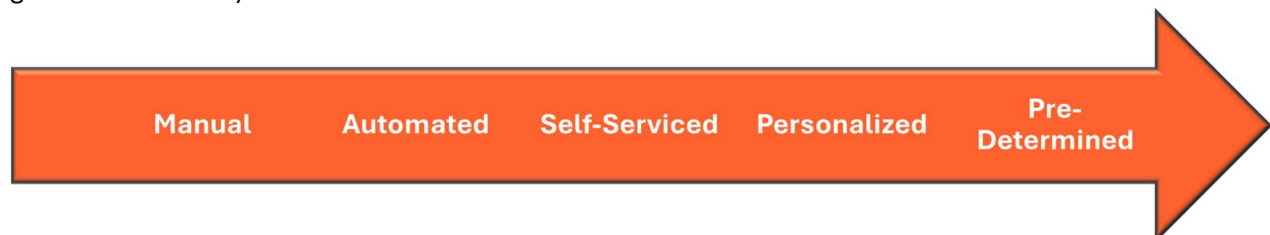
"This progression has already manifested itself in a lot of ways in our daily lives," says Travis Pine, Co-founder and CEO of Solstice Innovations. "Sometimes, it can feel intrusive. You can't use any social media without being inundated with advertising for products that AI thinks you might want. Have you ever had a conversation with a friend about something completely random, and the next

thing you know, you're receiving direct marketing for that very product or service on social media? That always gives one an uneasy feeling. However, sometimes, it doesn't feel intrusive at all. For example, when you log in to any streaming service, it suggests things you might want to watch based on what you've watched and liked.
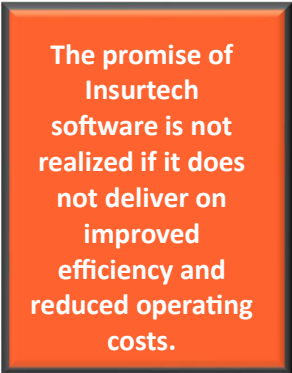
With Insurtech platforms, the early focus has been on making things easier for agents and underwriters to do their work. For example, when an agent starts a quote, a lot of the data required to produce the quote is automatically retrieved by simply typing in an address. Even that has look-ahead features that reduce the keystrokes required to enter the full address. But we are only beginning to scratch the surface when it comes to focusing on the customer. I envision an insurance world in the not-too-distant future where it will be commonplace to have several tiers of underwriting decisions being made by AI, using real-time data sourcing and analytics to make the 'smartest' decision on several types of risks."

It is vital to note that in the example of home delivery meal kits, the operations of successful providers are highly automated, enhancing efficiency, accuracy, and scalability while minimizing operating costs. Otherwise, the meal kits would not be affordable to the consumer, and the provider would not be profitable.

While the emergence of online insurance platforms and the term "Insurtech" are comparable to the advent of home meal kit delivery, there is one glaring exception. While Insurtech promised operational efficiency, resulting in cost reductions, it initially failed to deliver on that promise for various reasons.

You can rightfully argue that Insurtech improved things in several ways, not the least of which is the intention to gradually and painfully try to move away from inflexible, difficult-to-maintain mainframe systems and localized server farms; but also, the consolidation of certain functions, like policy and claims administration, into a single platform, and the accessibility of data. But just as with the home meal kit provider, if the operations behind the scenes are not efficient, accurate, and scalable while reducing operating costs, it is difficult to declare it successful. There is a lot of promise yet to be fulfilled.

> **The promise of Insurtech software is not realized if it does not deliver on improved efficiency and reduced operating costs.**

This leaves many Insurtech platforms with a significant, seemingly impossible challenge. They must simultaneously step back while stepping forward.

REVOLUTIONIZING TRADITIONAL INSURANCE PROCESSES

STEP BACK

The step back necessitates revisiting the Insurtech promise of operational efficiency. This may require a reset of some expectations, particularly in Insurtech companies with little to no insurance experience, who made broad assumptions, ignoring realities such as state or federal regulations, that effectively resulted in roadblocks to complete automation. For others, it is a recognition that operating efficiency was missed in the rush to create a "shiny, new object" to draw new business.

In the early 2000s, having an elegant front-end website put you ahead of the pack, but that is no longer the case. It is not enough to look good on the front end. Advancements in technology must do much more than just produce a good-looking web interface. A new emphasis is being placed on improving

back-office configuration capability, data collection, and automation, reducing operating costs while increasing product transparency and simplifying platform configuration. While it is great to have better underwriting, better ability to forecast claims, and better ability to detect fraud, "better" is not enough. If it is not more secure, faster, customer-centric, and less expensive, the promise of Insurtech is only partially fulfilled by making some things better.

Pine says, **"It is easier for new Insurtech platform providers to address operational efficiency than those that have been around for a couple of decades because we witnessed how the early Insurtech solutions around the turn of the century missed it - the "new legacy" systems, as we call them. While their application of the new technology of that time has garnered several of these software companies robust market share, their ability to truly innovate and leverage today's latest tech is greatly mitigated. We had the advantage of starting out with a fundamental focus and intent on providing operational efficiency instead of having to address it retroactively, which is nearly impossible once a system's architectural foundation is laid. That is a big advantage companies like ours are leveraging."**

Operational efficiency and cost reductions are not limited to business functions. They include the cost of implementing, maintaining, and continuing to innovate a software system. An Insurtech platform that costs as much as, or more than, the business operation savings that result from it does not fulfill the promise of Insurtech. Any time an existing solution must go backward to move forward, it is highly likely an increase in the cost of ownership, operation, or use will result. So many of today's Insurtech software packages require so much costly setup, configuration, and maintenance that they have failed to deliver on their original promise of saving their clients money.

STEP FORWARD

The step forward is the continued innovation and improvement on both the back and the front end through innovative and emerging technologies, such as AI, with an increased focus on being customer-centric.

In the context of this document, the term 'back-end' does not refer to an outdated meaning of a nightly batch-processing mainframe system. Instead, it refers to the business processes typically performed by carrier personnel, such as underwriting, capacity management, fraud detection, etc. Likewise, 'front-end', does not refer simply to a web-enabled interface to a legacy system. Instead, it refers to all customer-centric features, capabilities, and data accessibility for the agents and policyholders.

"By starting with an early focus on operational efficiency, client-empowered product configuration, and low system maintenance, we are uniquely positioned to move forward with both back and front-end innovations…and the customer, in a synchronized manner," Pine continued.

This includes the recognition by the insurance carrier and the Insurtech provider that the carrier has two primary customers: the policyholder and the agent (the term "agent" here is meant to include a wide range of parties, such as independent and captive agents, MGAs, and brokers). Both customers must be served, and each, particularly the policyholder, has ever-evolving and potentially conflicting expectations.

Agents have one overwhelming demand: to make it easy to write and retain business. The easier it is for the agent to create a fast, accurate quote, the more likely they are to sell policies. The more

automated it is to bill and collect at renewal or process endorsements, the higher the retention rate. On the other hand, policyholders want to work less and less, if at all, with a human agent.

Jeff Wargin, CPO of Dyad, an Insurance Technology company, says in the 2024 "Insurance Journal" article entitled "Leveraging Technology: Revolutionizing the Distribution "Middle" in P&C Insurance,"

> *"In the ever-evolving landscape of Property and Casualty (P&C) insurance, the distribution 'middle,' comprised of intermediaries such as agents, brokers, MGAs, and wholesalers, plays a pivotal role. Traditionally, this segment has been the bridge between insurance carriers and policyholders, facilitating the purchase of insurance products while providing personalized advice and assistance. However, with advancements in technology, the distribution 'middle' is undergoing a significant transformation, leveraging innovative tools and platforms to enhance efficiency, reach, and customer experience."*

But carriers cannot afford to say, "Never mind what the agent wants, I am going to focus on the policyholder," nor can they say the opposite - not at this point in the Insurtech revolution and perhaps not ever.

HOW DO YOU PRIORITIZE?

Insurtech must both step back AND step forward. It also must innovate on both the front AND the back end, AND it must focus on both the agent's AND the policyholder's evolving expectations. AND it must do all of this while focusing on the additional challenges of system performance, availability, and security.

How do you prioritize among these "must haves"?

Fortunately, we have reached a point in the evolution of Insurtech at which we do not have to. Emerging Insurtech providers, like Solstice Innovations, recognize that to truly differentiate in a crowded market and to fully deliver on the promise of Insurtech, you must do all of it simultaneously.

In the "Intersection of Insurance and Technology – Alchemy Crew" 2024 post, investor David Schapiro says, **"As we near the conclusion of our journey, a new wave of Insurtech startups emerges with an approach towards tackling challenges and exploring opportunities in the insurance sector. These visionary companies are solely dedicated to revolutionizing product launches, enhancing claims**

processing efficiency and actively supporting the insurance industry in adapting to innovations like AI. They stand as pioneers to shape the future of Insurtech and navigate territories."

And that begins with cloud-native technology.

In the "Insurance Journal" article "Real-Time, Integrated, Automated Compliance Becoming Industry Standard," Regina Stephenson says, **"*Carriers and agencies that hope to maintain a leading edge will necessarily look to the promises of cloud-native and low-code technologies that can deliver on the promise of flexible infrastructure while preserving the integrity of their current systems.*"**

Cloud-native Insurtech has a distinct advantage over cloud-based and a massive advantage over non-cloud solutions. By their nature, cloud-native solutions are more reliable, more secure, and faster in terms of the speed-to-market of enhancements and, ideally, in delivering new or evolving products.

EMBRACING THE SHIFT – EMBRACING THE REVOLUTION

For the Insurtech provider, the definition of "customer" is expanded to include the policyholder, the agent, and the carrier. The grand vision is for a more customer-centric business model comprising all three.

Ironically, one of the best ways to embrace the innovation revolution has nothing to do with the technology itself.

The Deloitte 2024 Global Insurance Outlook states:

This shift to a more customer-centric business model will likely require advanced technology adoption and modification of company culture to help minimize siloed interactions, enhance collaboration among employees, and increase accessibility of customer data—but skill sets may need to be augmented.

In other words, to fulfill the promise of Insurtech and truly revolutionize, insurers and Insurtech providers must focus on internal cultural change beyond technology. New skills, in-depth insurance knowledge, and a customer-first mentality are required.

Particularly for Insurtech providers, haughty messaging such as "We have simply the **BEST** technology available today" represents the words of a dying breed, even if that is a slow, agonizing death.

"**YOU** are the customer. We **GET** you. We are here to **ENABLE** you, not to tell you how you must embrace technology and do business" is the kind of messaging and company culture that represent the way forward.

"Again, we find ourselves at an advantage because this is not our first Insurtech. We founded our first one, an extraordinarily successful flood insurance technology and business services company, literally because we thought there must be a better way of doing things while actually listening to the customer - to deliver what they wanted, not what we wanted them to have," added Pine. **"We carried that same mentality and culture into Solstice Innovations. The greater challenge is shifting from a startup, where everyone is a multitasker and collaboration is essential, to scale the company without losing that entrepreneurial spirit and sense of fun. The more successful Insurtech startups will do that. The rest will fall by the wayside or become like the old, stodgy, and expensive veteran providers."**

> People and company culture are a bigger key to embracing the technology revolution than the technology itself.

However, organizational culture change does not occur overnight; if it is targeted change, it does not happen without intentional effort. The organizational development (OD) and change necessary for setting a customer-centric culture requires multiple steps, such as:

> Intentional change requires methodical steps supported by numerous enablers, beginning with leadership commitment.

1. Identify the need for change: An honest assessment based on competitive analysis, metrics, customer feedback, employee surveys, etc.
2. Define the vision and goals: Identify what you expect to achieve from change.
3. Engage the stakeholders: Define why the change is necessary to excite them and get them on board with it.
4. Develop the change strategy: Develop a formal plan to close the gap between today's reality and the vision.
5. Implement the change: Assign a plan manager (OD practitioner) to execute, track, and manage the plan – heavily emphasizing communication.
6. Monitor and evaluate: Measure results continually as aspects of the plan are implemented to determine whether the expected results are realized—feedback loops are critical.
7. Adjust accordingly: Based on results and feedback, adjust the plan and, potentially, the goals when necessary.
8. Institutionalize the change: Determine ways to reinforce the change and implement methods for continuous improvement.
9. Celebrate success: Recognize efforts and celebrate milestones while documenting lessons learned for future/additional OD initiatives.

Successful, sustainable change is also dependent on several enablers, such as the following:

- **Leadership Commitment**: Leaders are on constant display. Behavior should exemplify a customer-centric culture as the priority and clear communication of the vision.
- **Training and Development**: Training and development should include hard/technical skills (how to) and soft skills (I empathize with you).
- **Employee Engagement**: By including employees in the entire process, you can achieve a greater sense of ownership among them so that they become change agents rather than recipients of change.
- **Customer-Centric Processes**: Establish regular (or constant) feedback loops, extracting and acting on suggestions for process improvement, simplification, automation, and, ideally, elimination.

- **Cross-Department Collaboration**: Encourage cross-team collaborations through multiple methods such as group chats, collaborative workflows, cross-training, and shared goals.
- **Technology**: Use available technology, such as automated surveys, CRM systems, and live chats, to offer real-time communication and data collection.
- **Culture of Continuous Improvement**: Show feedback is valued and acted on and conduct frequent operational and customer service reviews.
- **Empowered Employees**: Reduce the need for hierarchical approval processes and decision-making authority, leaving it to the employee as much as is feasible while making it safe and appreciated when employees suggest innovative ideas.
- **External Partnerships**: Treat customers as true partners, with ongoing collaboration to ensure you deliver what they want and need rather than what you have and want them to have.

The customer-centric aspects of the organizational culture shift are broader than how employees interact with one another or how they engage with the customer. It must also be present in the way technology is developed and advanced.

On this topic, Pine says, **"Insurtech platform providers of 20 years ago had, and have, a tendency to make their clients captive, and they feel trapped by technology or onerous contract terms. In the early days of technology, this was less intentional and more just how things had to be and modeled after many of their larger Fintech counterparts in the ERP world (i.e., People Soft). I started my career with Arthur Andersen and saw how these business models relied heavily on IT Service providers like Andersen to make them work. So that meant that a client would pay a fortune up-front for the software licenses, and a maintenance package, and often an 'upgrade path'...only to realize they needed to spend tens, and sometimes, hundreds of millions of dollars more to make the software they just paid for actually work for them.**

That always seemed so upside down to me, even back in the 90s. Whether intentional or not, it does leave clients feeling trapped. I just believe that is a terrible business model. We want customers to stay with us because they want to and they see the value and benefit we bring their business every day, not because they feel like they're trapped. Our perspective is, 'We aren't here to penalize you for selecting us as your trusted partner by immediately requiring you to spend millions more to make our platform work. And if you don't need to use everything our platform offers and instead would prefer to integrate it with other platforms for various functions, no problem. If you want or need to leave, we wish you wouldn't but understand that our role is only as a steward of your data and your business. We won't make that process difficult or throw up roadblocks. This philosophy is exactly why we have always had such a high client retention rate...because our clients WANT to stay, not because we made them feel trapped."

As insurance companies and Insurtech providers establish and institutionalize a customer-centric culture, enabling technology needs will become apparent naturally, either leading to the acquisition of existing technology or the development of yet-to-be-created technology to support the needs.

Otherwise, the risk of acquiring or creating technology in search of a problem (e.g., Blockchain in insurance) is high, while the likelihood of embracing it in a way that allows it to deliver its full potential is low.

CONCLUSION

Insurance technology continues to advance, just as it does in all aspects of life and business. However, the insurance industry has a reputation for moving slowly because risk assessment and avoidance are its heartbeat.

However, to remain viable in the future, digital transformation, digitization, and the adoption of emerging and innovative technologies, such as AI, and a customer-centric business model are no longer about disruption. They are about survival.

Insurtech providers must focus on all aspects of the Insurtech promise to maximize benefits to carriers, agents, and policyholders. Ironically, a key to the success of the technology revolution is not the technology itself; it is people and a customer-centric company culture.

EMBRACING INNOVATION FOR A DIGITAL INSURANCE REVOLUTION

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