Innovating to grow: A new world of opportunity for insurers

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Executive summary

The primary drivers of **disruption** in insurance – notably, FinTech (and more specifically, **InsurTech**) – are coming from outside the industry. However, while the pace of change and market disruption has been daunting for most incumbents, the growing presence of InsurTech companies is not a threat, but rather is creating real **opportunities** for the industry.

Although technological innovators may have solutions to customer needs, they often lack insight into how they can apply and scale them and in which industries. Accordingly, insurance companies are in a powerful position to **move beyond incremental innovation to the bigger breakthroughs** that result in meaningful competitive differentiators. In fact, InsurTech can open up new avenues to innovate, improve the relevance of insurance products and services, accelerate speed-to-market, and provide new opportunities for growth for industry front runners.

We see a combination of market and organizational priorities which open the door for these new opportunities.

- **External opportunities** primarily relate to social and technological trends and pertain to the shift in customer needs and expectations (which digital technology has facilitated). Insurers have been taking action in these areas to stay relevant in the market and at least maintain their market position. For many companies, focusing on these opportunities remains critical, but this is not enough for them to gain a truly competitive advantage.
- **Internal opportunities** relate to using technology to enhance operations and business function execution. For example, some insurers have used artificial intelligence (AI) technology to enhance internal operations, which has improved efficiencies and automated existing customer-facing, underwriting and claims processes.

Executive summary

In order to take full advantage of these opportunities, insurers need to determine their innovation needs and make meaningful connections with innovators. Doing so will help them balance their **innovation mix** – in other words, where they can make incremental innovations (the ones that keep them in the game) and where they can strive for real breakthroughs with disruptive and radical innovation (the ones that position them as market leaders).

An effective **enterprise innovation model** (EIM) will take into account the different ways to meet an organization's various needs and help it make innovative breakthroughs. The model or combination of models that is most suitable for an organization will depend on its innovation appetite, the type of partnerships it desires and the capabilities it needs. EIMs feature three primary approaches to support corporate strategy:

- **Partner** – Innovation centers (also known as hubs or labs) are the most common of the three EIM approaches. Their main purpose is to connect insurers to the InsurTech ecosystem and create new channels for bringing an outside-in view of innovation to the business units.
- **Build** – Incubators are a common and effective way to build innovative capabilities and accelerate change. They can be internal, but most companies have preferred to establish them externally and then bring their ideas back into the company.
- **Buy** – In this case, an insurer typically will establish a strategic corporate ventures division that sources ideas from outside the company. The company provides funding and support for equity, while the venture explores, identifies and evaluates solutions, and participates in new ventures.

Companies can select elements from each of the above models based on their need for external innovation, the availability of talent, their ability to execute, and the amount of investment the organization is willing to commit.

Even though insurers can create the internal structures that support innovation, most of them will have to enlist **external resources** in one way or another. Accordingly, they will need to assess the availability and compatibility of existing talent and determine how and where they can find what may not currently be available. Much like with enterprise innovation models, there are certain ways (often in combination) that insurers can locate and obtain the resources they need:

- **Acquire** the new talent from start-ups.
- **Attract** the talent directly from the market.
- **Partner** with start-ups, technology vendors, universities, researchers and other proven innovators.
- **Grow** the talent.

Executive summary

In addition to the challenges related to building the right innovation model and employing the best available resources, it is important to note that **new risk exposures** and uncertainty about the effectiveness of existing measures to protect against will require companies to make especially careful consideration about the sustainability of their EIMs and actual innovations. In particular, partnering with or acquiring InsurTech companies means that the incumbent's traditional **IT boundaries are likely to stretch** more and more with each new venture. Moreover, because start-ups are geared toward rapid innovation, they do not always consider that **regulatory and compliance** issues or violations can arise later. Effective changes will come from close consultation between insurers and regulators, but with full and open consideration of emerging players' points of view.

In closing, while most insurers have embraced change to support incremental innovation, most of them recognize they need to do much more in order to promote the breakthroughs that result in a true competitive advantage. Accordingly, insurance leaders' **innovation agenda** should include:

- **Scenario planning** – *What are potential future scenarios and their implications?*
- Real-time **monitoring and analysis** of the InsurTech landscape – *What's out there that can help us now, and what do we want that may not exist yet?*
- Determining how to promote enterprise innovation, including which combination of approaches will most effectively **accelerate and enable execution** – *What's the best approach for us to stimulate and take advantage of innovation?*
- Augmenting the organization with new and different types of **talent** – *Where are the innovators we need and how can best attract and employ them?*
- **Cyber security and regulation** – *Are we prepared for the operational challenges that new technology can present, and have we and our real and potential partners considered the compliance ramifications of what we're doing or considering?*

Disruptive forces

We continue to engage insurers and industry stakeholders in order to refine the perspectives we've developed in our Insurance 2020 publication and video series. People throughout the insurance industry are monitoring the ways in which social, technological, environmental, economic and political (STEEP) factors are developing and how they may affect them. The changes that we've anticipated have become reality – in fact, thanks in particular to technological and closely associated social change, more rapidly than we originally predicted – and the way established insurers and new entrants are reacting will define the industry for the next generation and perhaps even beyond.

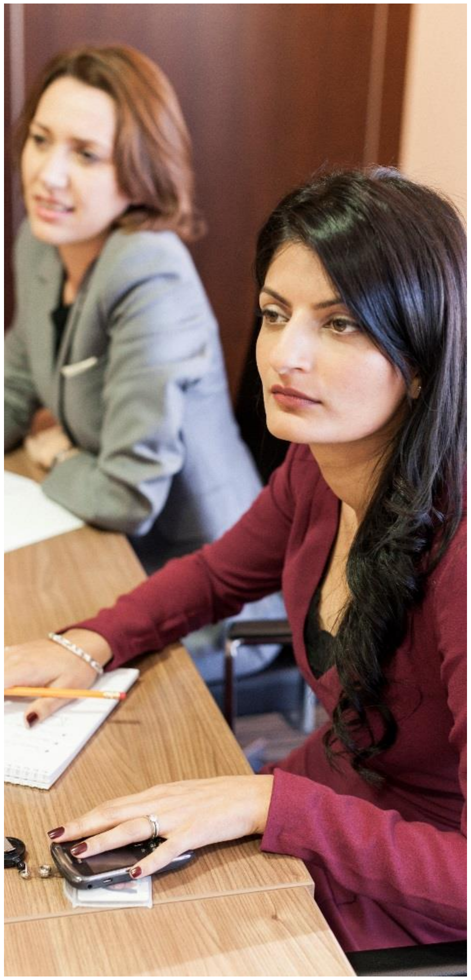
The biggest single facilitator of change is technology. Recent advancements in this area are providing insurers new opportunities to create tailored solutions and services based on newfound knowledge of a customer segment or individual consumers. Within organizations, technology offers the promise of creating alternative business models, streamlining operations, and delivering insights to support strategic decisions.

However, we realize it's not easy to make this promise reality, and disruptive forces both inside and outside the industry are resulting in a need to make difficult strategic and operational changes in a short timeframe. In fact, in PwC's most recent global CEO survey, nearly 70 percent of insurance CEOs said the speed of technological change was a threat to growth and more than 60 percent expressed concerned about shifts in consumer spending and behavior.

Digitization & customer revolution

Many of today's customers use online sources to make more informed purchasing decisions than customers of even 15 years ago could ever dream of. The ability to go online from practically anywhere and at any time enables them to make choices, in real-time, after comparing product options, price, and feedback from others. Customers can seek input and options with such ease that the companies which best align their products and services to a customer's needs are gaining a competitive advantage. For example, a sharing economy (e.g., peer-to-peer insurance) has emerged in response to customer needs – needs that are common knowledge thanks to technological innovation which has resulted in convenient, user-friendly sharing and connectivity platforms.

Disruptive forces



Evolving technologies & intelligence

Technological change has not been linear, and almost all traditional businesses are struggling with the implications of this change occurring at such a rapid pace. Many established players have to navigate the boundaries of their existing systems and large internal bureaucracies that have slowed their development and adoption of cutting-edge, customer-focused solutions and value propositions.

In contrast, more nimble market entrants are finding it easier to tap into new data sources and leverage advanced analytics that facilitate keen insights into market opportunities and threats. One example of these new technologies is the Internet of Things (IoT) that offers insurers new sources of information in real-time. In turn, the way they and their customers behave and interact is changing risk management. Other examples of new technology include artificially intelligence and cognitive computing solutions, which create meaningful insights from vast amounts of data by quickly identifying patterns that highlight opportunities and risks and, as a result, promote faster decision making.

Moreover, while the opportunity to use technology continues to grow, computing and data storage costs continue to drop, resulting in lower up-front costs for these same market entrants. Utilizing open source frameworks, scaled cloud computing, and developers who are available on demand, innovators are using the latest technologies to develop compelling, customer-focused value propositions.

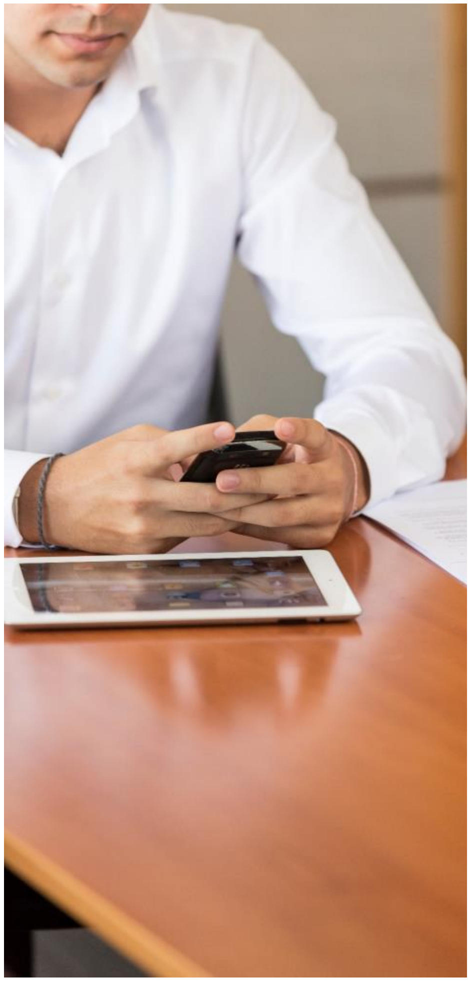
FinTech: Promise or peril?

There is a growing number of technology start-ups that focus on financial services. This relatively new sector is called FinTech, which has a growing InsurTech sub-sector. Funding of FinTech start-ups more than doubled in 2015, to $12.2bn (up from $5.6bn in 2014), based on the companies that PwC includes in its DeNovo platform. InsurTech has seen funding in line with FinTech investment overall. We expect investments to increase as new players and investors enter the space.

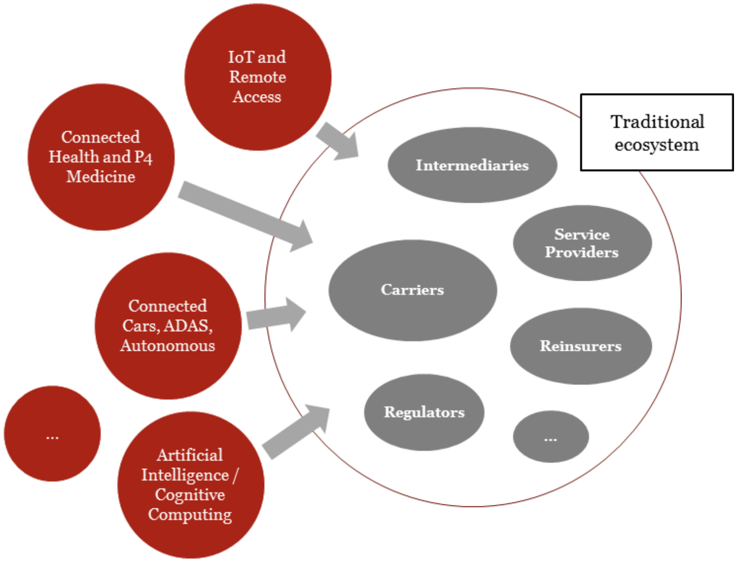
Some of the typical exploration topics across lines of business are:

- Personal lines: usage-based insurance, shared and on-demand economies, peer-to-peer, direct-to-consumer, ADAS & autonomous cars.
- Commercial lines: direct to small business, drones and satellite imagery, internet of things, alternative risk transfer, emerging risks.
- Life and retirement: robo-advice, personalized insurance, medical advances, automated underwriting, decreasing morbidity and mortality risk.

Disruptive forces



In fact, most of the current drivers of insurance disruption are not coming from the traditional insurance ecosystem. Rather, FinTech is shaping the insurance industry and financial services overall from the outside.



How will this change the way traditional insurers compete? While the pace of change and market disruption has been daunting, the growing presence of InsurTech companies is not a threat, but rather a real opportunity for insurers.

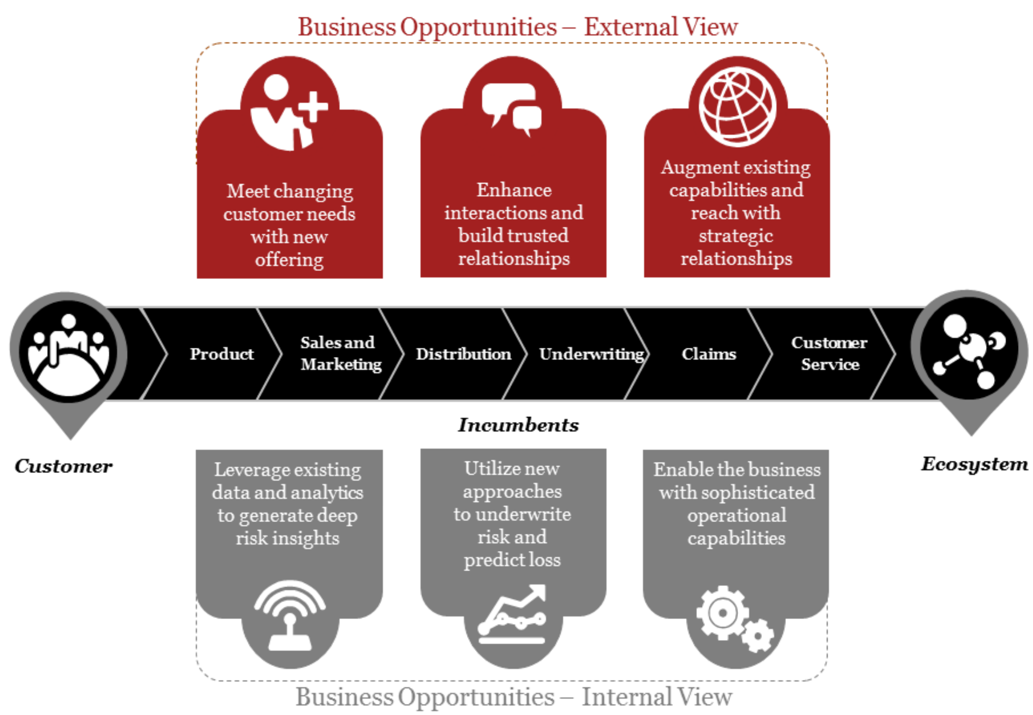
As innovative as some InsurTech solutions are, they cannot replace decades (and in some instances, centuries) of experience. Technological innovators may have solutions to customer needs, but often lack insight into how they can apply and scale them and in which industries. Accordingly, insurance companies are in a powerful position to help maximize innovation potential.

Indeed, InsurTech opens up new avenues to innovate, can improve the relevance of insurance products and services, accelerate speed-to-market, and provide new options for growth for industry front runners.

Opportunities for insurers

As part of PwC's Future of Insurance initiative, we have interviewed many industry executives and identified six key InsurTech business opportunities. We see a combination of market and organizational priorities, which open the door for both external and internal opportunities.

External opportunities primarily relate to social and technological trends and pertain to the shift in customer needs and expectations (which digital technology has facilitated). Insurers have been taking action in these areas to stay relevant in the market and at least maintain their market position. For many companies, focusing on these opportunities remains critical, but this is not enough for them to gain a truly competitive advantage.



Opportunities for insurers

External opportunities:

- Are mainly driven by customer expectations and needs and enabled by technology.
- Offer front runners the opportunity to gain market relevance and position themselves.
- Also offer fast followers opportunity because value propositions can be quickly replicated.

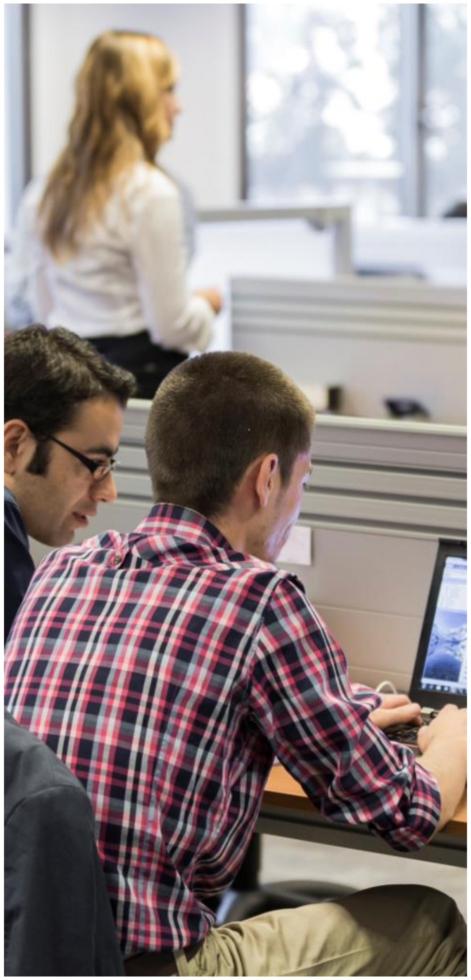
Internal opportunities relate to using technology to enhance operations and business function execution. For example, some insurers have used artificial intelligence (AI) technology to enhance internal operations, which has improved efficiencies and automated existing customer-facing, underwriting and claims processes.

Internal opportunities are:

- Mainly driven by technological advancements.
- A source of competitive advantage but demand deeper change.
- An opportunity to set the foundation for how the company understands and manages risk.

In order to take full advantage of these opportunities, insurers need to determine their innovation needs and make meaningful connections with innovators. Doing so will help them balance their innovation mix – in other words, where they can make incremental innovations (the ones that keep them in the game) and where they can strive for real breakthroughs with disruptive and radical innovation (the ones that position them as market leaders).

Opportunities for insurers

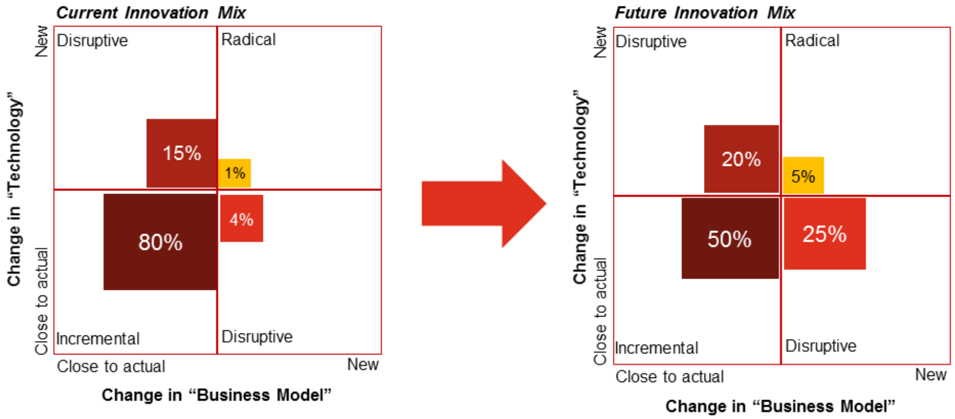


Some examples of change are:

- Incremental: Omni-channel integration, leveraging mobile and social media solutions and experiences to follow existing trends in customer and partner interaction;
- Disruptive: Usage-based and personalized insurance that leverages technology and data to develop new risk models based on behavioral factors. This also has the potential to drive radical change.
- Radical: Crop insurance, where data from different sources (such as weather and soil sensors) is leveraged to optimize and predict yield. As a result of this deterministic model, claims are payed up-front at harvest time.

There is no single perfect innovation mix. It depends on a company's strategic goals and willingness to invest. Insurers should take into account current InsurTech trends and determine long-term potential market scenarios based in part on current indicators and emerging trends. A short-term view will not foster the change that leads to breakthrough innovation.

In this context, a balanced innovation mix can help meet a company's short-term, incremental innovation needs, while select initiatives can help it leapfrog the competition in specific areas.



Opportunities for insurers

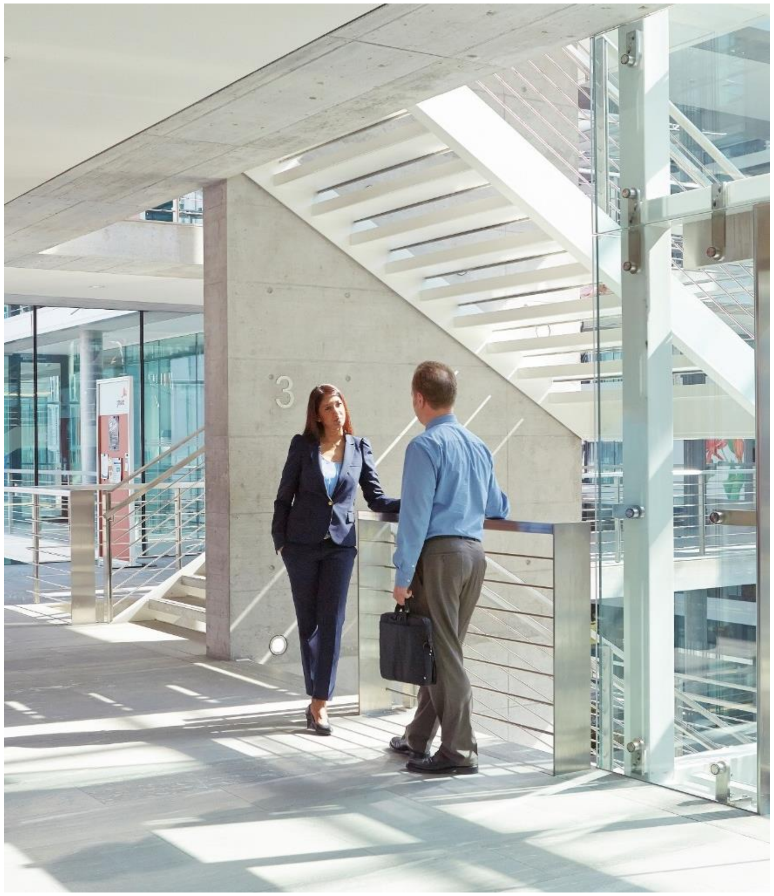
Establishing a path to innovation

Focusing on the foundational elements of the business and moving towards potential future market scenarios offer a great opportunity for companies to differentiate themselves from competitors.

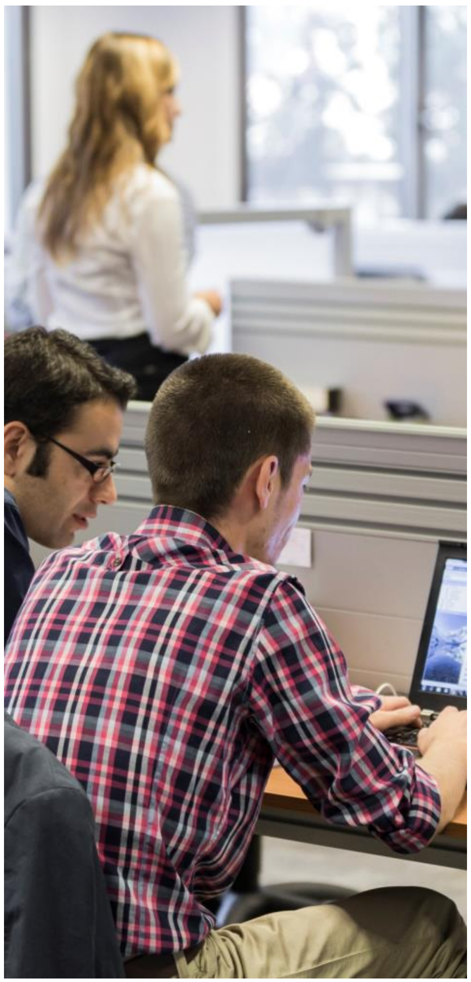
However, we understand that designing large-scale change can be intimidating. Accordingly, we suggest thinking big and starting small. This can help insurers better manage change, learn from early designs, and more easily maintain an evolutionary path forward. This approach usually includes partnerships with technological innovators; both parties can collaborate to develop small-scale, testable solutions, keep what works, and economically move on from what doesn't. Entering into partnerships also will provide insight into future investment needs and lay the foundation for potential acquisitions and other deals once there are commercially viable solutions.

That said, we feel it is important to note that a partnership with a technology start-up almost always requires mutual accommodation of different institutional cultures. Technology innovators tend to be less deliberative than insurers and emphasize speed-to-market first and foremost. They also tend to focus more on linear outcomes, while insurers take into account the various outcomes that could result if they do not address any and all potential risks. Related, technology innovators and many of the other industries they serve are not subject to the same regulatory scrutiny that insurers are. Accordingly, both parties will need to determine before they enter into a partnership that any solution will be in compliance with the various standards and regulations to which insurers must adhere.

While assessing external and internal market opportunities, determining the organization's appropriate innovation mix will help the company shape its strategic goals and balance the appetite for investment. InsurTech opportunities often do present risks that insurers will need to manage and mitigate. There is always a risk of failure – though the fear of failure can be an even greater risk.

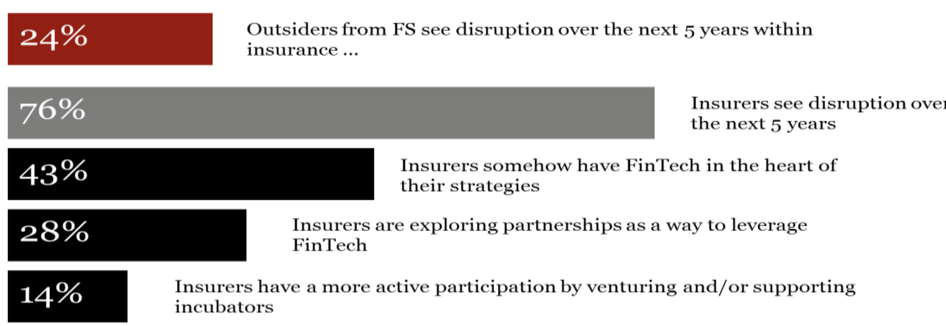


Embracing change



Despite a general acknowledgement that the industry faces unprecedented disruption, there is a disconnect between insurers' perception and willingness to invest enough to defend against or take advantage of disruption. We understand that most of the leading insurers may already be in the InsurTech ecosystem, but a large number of them still have the opportunity to define or refine the appropriate measures for exploring, designing, embedding, and fostering innovation within their respective organizations.

In our 2016 Global FinTech Survey, we found that insurance companies are very much aware of the FinTech revolution: 74 percent of insurance respondents see FinTech-related disruption as a challenge for the industry. However, only 43 percent of industry respondents claim that FinTech is at the heart of their corporate strategies. Even more have been slow to take action. Only 28 percent are currently exploring partnerships with FinTech companies, and even less – only 14 percent – are actively participating in joint ventures or incubator programs.



As a starting point, the following questions can help you evaluate how prepared your organization is to drive innovation.

- Corporate structure
  - Which parts of your organization drive innovation? Does the push for innovation occur at the corporate or business unit level (or both)?
  - How is the board engaged on decisions about the organization's innovation mix?
  - What is the organization doing to make innovation a part of its culture?
  - What are the main challenges your organization faces when driving innovation?

Embracing change

- Strategy, ideation and design
  - How does your organization become familiar with new trends and their implications?
  - To what extent has your organization utilized an “outside-in” view to inform your innovation model?
  - Which potential future scenarios have you identified and shared across the organization?
  - To what extent have you aligned your innovation portfolio strategy with potential future scenarios?
  - How does your organization approach ideation through execution?
  - Which capabilities are you leveraging to enable and accelerate the execution of new ideas?
- External participation
  - What investments has your organization made in innovation?
  - In which areas is your organization participating (e.g., autonomous cars, connected economies, shared economies)?
  - What structures (potentially in specific locations) has your organization created to support external participation?
  - To what extent has your organization managed to attract talent and partners?

Embracing change

Creating an effective innovation model

There is an obvious need for innovation models that enable insurers to take advantage of relevant and meaningful market opportunities. An effective enterprise innovation model (EIM) can facilitate external market awareness and capabilities while putting in place internal processes to design and execute new solutions.

An innovation model will promote a diverse approach to identifying new opportunities and potential partners from a variety of industries and specialty areas, as well as be flexible enough to evolve over the long-term view.

- **New product and service development:** Being active in InsurTech can help incumbents discover emerging coverage needs and risks that require new insurance products and services. Accordingly, insurers can refine — and even redefine — their product portfolio strategy. This will result in the design of new risk models tailored to underserved and emerging markets.
- **Market exploration and discovery:** Savvy insurers actively monitor new trends and innovations. Some insurers are even establishing a presence in innovation hotspots (e.g., Silicon Valley) where they can learn about the latest developments directly in real-time and initiate innovation programs. They apply different inputs to define and manage future scenarios.
- **Partnerships that drive new solutions:** Exploration should lead to the development of potential use cases that address specific business challenges. Insurers can partner with start-ups to build pilots to test and deploy in the market.
- **Contributions to InsurTech's growth and development:** Venture capital and incubator programs play an important role strategically directing key innovation efforts. Established insurers can play an active role by clearly identifying areas of need and opportunity and encouraging/working with start-ups to develop appropriate solutions.

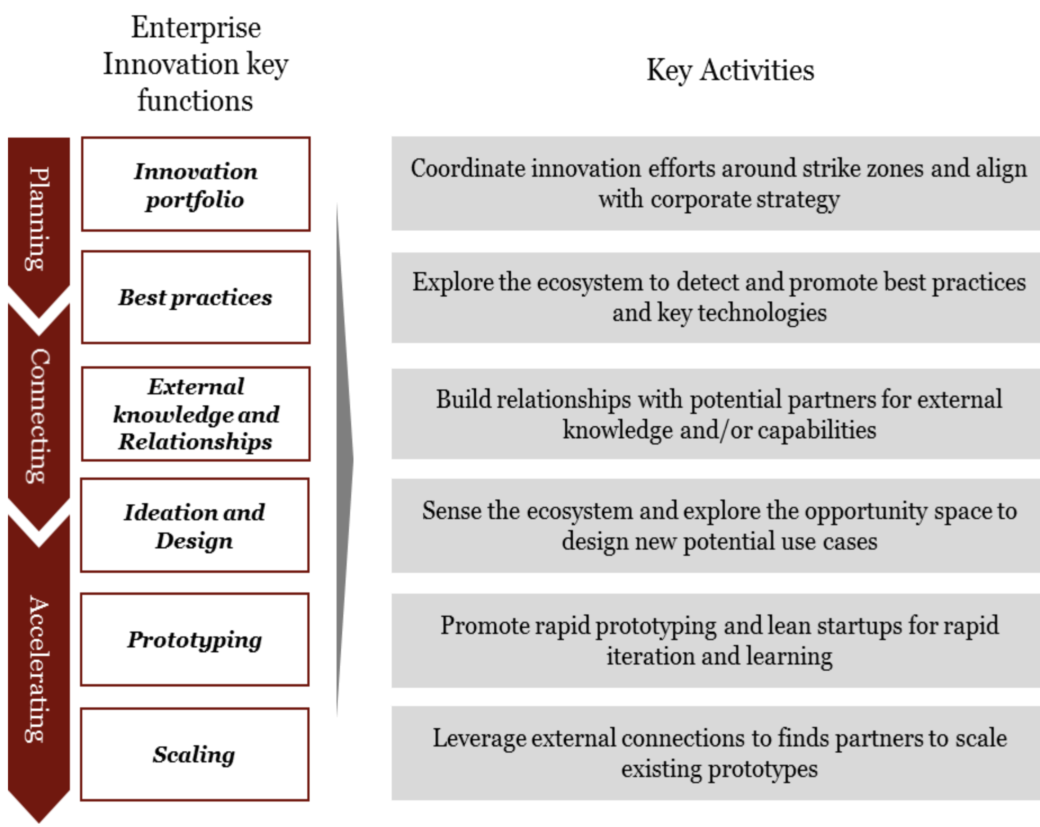
Establishing a path forward

An effective enterprise innovation model takes into account the different ways to meet an organization's various needs, including:

- Planning innovation based on potential future scenarios;
- Connecting and acting within the InsurTech ecosystem to drive open innovation:
- Accelerating the design though execution process; and
- Supporting innovation within the business units.

There are a number of design options to consider when structuring an organization's enterprise innovation model (EIM). The model or combination of models that is most suitable for an organization depends on its innovation appetite, the type of partnerships it desires and the capabilities it needs. However, whether the organization is designing a new enterprise innovation model or evaluating its current model, it is important that the model can accommodate six distinct functions.

The first function is critical to ensure proper innovation planning. Defining an **innovation portfolio** helps organizations balance their innovation mix (e.g., incremental, disruptive, radical) and allows the organization to coordinate innovation efforts around strike zones. With innovation frequently occurring within the business units and at the enterprise-level, having a defined portfolio of innovation efforts promotes the ability to share knowledge and capabilities within the organization. It plays an important role in keeping innovation initiatives aligned with corporate strategy and **potential future scenarios.**



Establishing a path forward

To ensure the organization's innovation efforts are in sync with – or even driving – the latest developments in the market, the model needs a formalized yet agile process for identifying and incorporating **best practices**. Dedicated assessment of FinTech advancements can allow insurers to identify and promote best practices and key technologies.

Additionally, maintaining a close connection with the FinTech market can help the organization develop its **external knowledge** and **relationships** with innovators. Through this process, insurers can identify potential partners that can help them understand evolving technologies and their applications, and even contribute to developing the capabilities they desire.

With a deeper understanding of the market, capabilities and key players, insurers can be better positioned to facilitate innovation, **ideation**, and **design**. While some FinTech companies already have compelling insurance applications, insurers have a great opportunity to identify and design new potential use cases.

However, one of the biggest challenges in innovation is moving from the ideation and design stage to execution. As we describe later, different operating options for the enterprise innovation model can support and **accelerate execution**.

Establishing a path forward

Fast prototyping is key to quickly creating minimally viable products/solutions (MVP) and bringing ideas to life. Early stage start-ups develop and deploy full functioning prototypes in near-real time and go-to-market with solutions that are designed to evolve with market feedback. In this scenario, the development cycle is shortened, which allows start-ups to quickly deliver solutions and tailor future releases based on usage trends, feedback and/or to accommodate more diverse needs.

Incumbents can follow the same approach and align appropriate capabilities and resources to develop their own prototypes. They also can partner with existing start-ups that have a MVP to help them to move to the next stage, **scaling**. For this, they have to take into consideration several factors, including operational capacity, cyber risk and regulation (among others) to deploy the MVP in an "open" market. As opposed to controlled pilots or proofs of concept that are controlled environments, this "open" market is driven by demand. Lack of proper resources and the inability to scale the start-up will severely compromise or actually prevent successful innovation.

The ways to accomplish all of this vary based on how the organization plans to source new opportunities and ideas, how it plans on executing innovation, and how it plans to deploy new products and services. The following graphic provides examples of enterprise innovation operating models by primary function.

	Innovation Center	*Incubator*	*Strategic Venture Capital*
Sourcing	*Ideas sourced from both inside and outside the company*	*Ideas mainly sourced from outside the company*	*Ideas sourced from outside the company*
Structure	*Dedicated corporate team constantly monitors trends and markets*	*Usually an external structure, but also "soft" internal incubators*	*New ventures division set up to identify and create new ventures*
Operation	*External connection with the ability to "plug" innovations into business units*	*Incubator explores and manages ventures to drive from ideation to execution*	*Pitch and invest model where the company provides cash and support for equity*
Governance	*Stage-gating process to balance procedural burden and risk*	*Expert panel (int/ext) provides high level guidance and approval*	*Corporate network provides high level guidance for investment*
Go-to-Market	*Idea / venture adopted under company's brand*	*Venture can go to market under it's own brand or Company's brand*	*Ventures stay in the market under its own brand*

Establishing a path forward

The innovation center

The innovation center (also named “lab” or “hub”) is a structure at a corporate level that bridges external innovation with business unit needs and innovation opportunities. It relies on internal subject matter experts and/or innovation champions to ignite and drive innovation initiatives at a business unit level. With this model, innovative new products and services go to market under the company’s brand.

The innovation hub provides an outside-in view while promoting innovation internally. With this model, the company dedicates a team to constantly monitor trends and market activity, build and maintain relationships with key InsurTech players, identify potential future scenarios, and determine new partnership opportunities.

Regardless of the model they use, we recommend that insurers of all sizes consider developing this formal corporate structure and create an external connection to be leveraged based on the view of potential future scenarios.

If it is not managed through business units, the ability to execute innovation (i.e., building prototypes and scaling models) can be a challenge. Because execution is a key success factor, we recommend insurers consider complementary innovation models to help promote positive outcomes.

The incubator

The incubator provides the ability to drive innovation from ideation to execution and helps to identify new opportunities and develop related solutions. It has proven especially effective in addressing complex problems and devising new approaches to addressing them.

Although the incubator can be internal, industry leaders see in external structures the opportunity to create unique development environments and attract required talent. With this approach, ideas are generated mostly from outside the company and a panel of innovation specialists that can be internal and/or external provides high-level guidance and approval for the innovation the company is seeking through the incubator.

Although the incubator drives initial innovation stages, business units typically become involved gradually during the development process and have an important role, especially when planning to deploy new solutions within the organization. The incubator can wind up as a start-up that can go to the market under its own name.

Facilitating execution is one of the main strengths of the incubator model. It maintains the “idea” until a prototype is developed and a MVP is delivered. As anticipated, the gradual involvement of business units during the process is vital to enabling the model to adequately scale. Upon adoption by its future owner, the related challenges of operating capacity, cyber risk, and regulation, among others, can be addressed gradually by leveraging the experience of both the incubator and business unit.

Thanks in large part to its innovation panel, the incubator is an effective way for insurers to identify new opportunities and bring new solutions to life. However, it does require a significant investment of both money and resources.

Establishing a path forward

Strategic venture vapital (SVC)

The SVC model offers the opportunity to participate via stake or acquisition in relevant InsurTech related players. This form of participation can be seen as way to influence and shape the development roadmap of specific start-ups (e.g. pushing him to solve a specific business problem), acquire key capabilities and talent, and/or as a way to drive value from strategic investments.

In the venture capitalist model, the company establishes a new ventures division, where ideas are exclusively sourced from outside the company. The company provides funding and support for equity, while a SVC from this new structure explores, identifies and evaluates solutions on its own and brings to market new ventures under its own brand.

The funds SVC invests in a start-up provide the financial resources to help new players augment their capabilities and scale their business model. This could lead to potential market joint ventures, acquisitions, or other deals to monetize the initial investment.

Incumbents with SVC arms are usually leaders in specific market segments and therefore leverage their experience and knowledge to select key ventures. To become more active with FinTech, we see these structures linking to innovation centers, thereby allowing companies to connect ventures with business units.

EIM operating options

	Innovation Center	Incubator	SVC
Innovation Portfolio	High	Medium	Medium
Best Practices	High	Medium	High
External knowledge and relationships	High	Medium	High
Ideation and Design	High	High	Low
Prototyping	Low	High	High (*indirectly*)
Scaling	Low	Medium	High (*indirectly*)

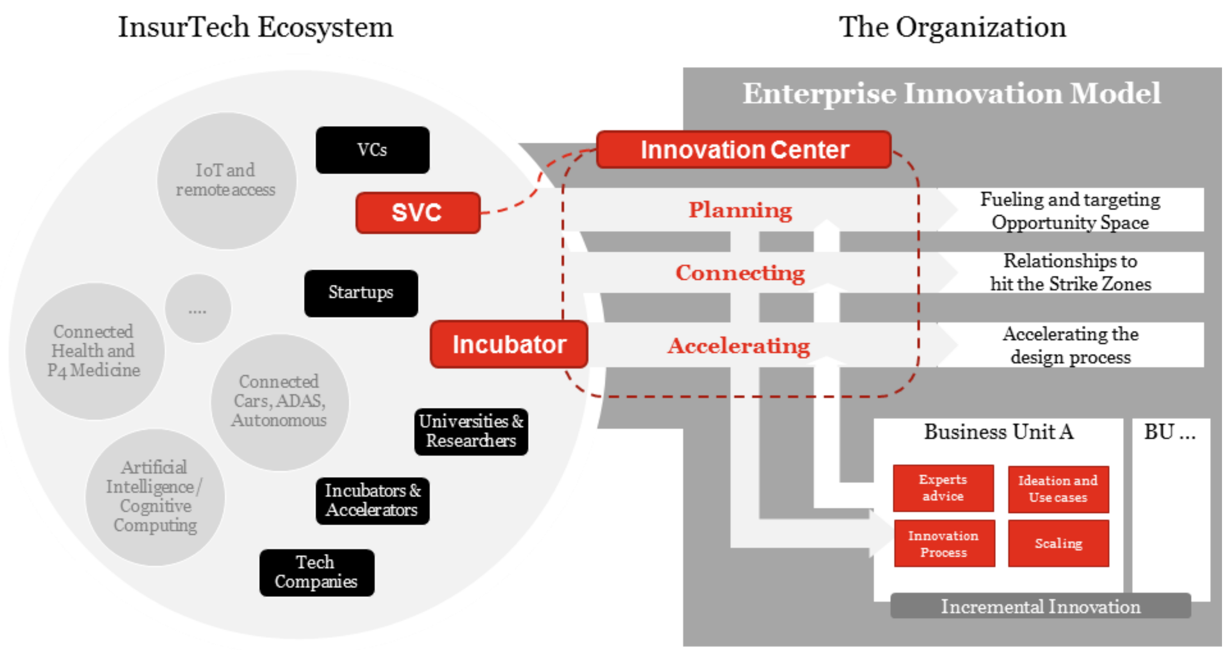
EIM operating characteristics

	Innovation Center	Incubator	SVC
Main objective	Ability to leverage an external connection to drive innovation and face implications of future scenarios	Accelerate, design, development and execution of solutions for complex industry challenges	Invest in strategic capabilities and talent, through acquisition or taking stake
Trigger to adopt	Limited ability to respond to emerging trends and lack of relevant connections	Ideas to develop new sources of competitive advantage while protecting IP	Awareness of relevant start-ups and need to have an active participation in this
Key success factor	Sponsorship and ability to execute through business units	Ability to "plug" incubated solutions in to business units	Leverage industry knowledge and future scenarios view for relevant ventures in early stage
Options for externally sourced	Supported by different players but a key corporate function	Ecosystem incubators and/or accelerator can be leveraged but IP has to be protected	CVC partners can be leveraged to identify potential targets, but a corporate structure should drive ventures and related innovation efforts
Most typical complementary model	Strategic Venture Capital	Innovation Center	Innovation Center
Ability to attract relevant talent	Medium to High if Innovation Hub deployed in innovation hotspots	High for external incubators	High by acquisition of JVs, challenge to retain talent
Investment considerations	Depends on FTEs and physical structure (in hotspots)	Can be optimized in an open model where new start-up can be funded by external investors	Depends on available total funding and analyst capability (FTEs)

Establishing a path forward

As the diagram to the right illustrates, each of these models provide options for insurers to connect to the FinTech market and explore new capabilities within the context of their business. Instead of choosing one model over the other, we propose an enterprise innovation model that combines key elements from each. Companies can select elements based on their need for external innovation, the availability of talent, their ability to execute, and the amount of investment the organization is willing to commit.

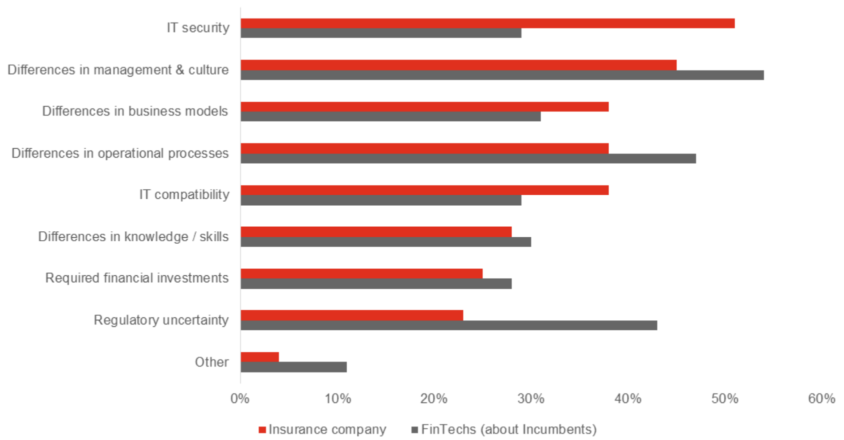
Also, when considering an enterprise innovation model, insurers have the opportunity to address opportunities using all or a combination of the three operating models. For example, they can choose to participate in VCs and/or incubators instead of creating their own structures.



Attracting talent, bridging gaps

While we have seen the enterprise innovation model serve as an effective framework to encourage innovation, success ultimately depends on having the right talent. Complicating the situation is the fact that an insurer's culture often influences an external company's decision about partnering with it. In fact, according to our 2016 Global FinTech Survey, over half of FinTechs see differences in management and culture as a key challenge in working with insurers. Insurers also realize this, and 45 percent of insurance companies agree that this is a major challenge.

What challenges did/do you face in dealing with FinTech companies?



Source: PwC Global FinTech Survey 2016

The different enterprise innovation models rely on talent to bridge this cultural gap. In fact, in our experience, individuals who are well connected in the InsurTech ecosystem and have an entrepreneurial mindset have been the ones who successfully adopt these models.

How does a company attract and retain this kind of talent? There are four primary ways:

- **Acquire** the new talent from start-ups. This works well if the acquired company keeps running its business under its own start-up rules, away from the acquirer's bureaucracy. Otherwise, if there is too much acquirer interference, then retention will be a challenge in a market that covets innovators.
- **Attract** the talent directly from the market. This option typically requires a new mindset from the hiring company in terms of business role, work environment, and even location. Creating a structure in relevant innovation hotspots will help to make an offer more attractive, facilitate external connections – where "things happen" – and will demonstrate the insurer's commitment to letting innovators be free to innovate.
- **Partner** with start-ups, technology vendors, universities, researchers and other proven innovators. This option represents a major opportunity because it enables the insurer to create the connections to and formal partnerships with new talent. That said, identifying needed capabilities is relatively easy, but for the relationship to work, there will need to be strong alignment of purpose between the organization and the new partners. In this case, the Innovation Hub should be the most helpful model. Moreover, although retaining partners is not likely to be an issue initially, a strained relationship sooner or later will jeopardize the ability to attract new partners and ultimately minimize breakthrough innovation.

Attracting talent, bridging gaps

- **Grow** the talent. This option is probably the least disruptive because it doesn't require external changes. Large organizations have the opportunity to discover talent within their structures. But, the organization will have to ascertain and leverage the mind-set and the professional background of employees in many different ways. Gamification, internal collaboration groups, and other resources can help to find potential in-house innovators, but most companies will need a more sophisticated staffing model in order to develop this talent (e.g., having specific development plans and offering "external" experiences in projects and/or with partners).

While insurers can create internal structures to support innovation, most of them will have to enlist external resources in one way or another. Accordingly, they will need to assess the availability and compatibility of existing resources and determine how and where they can find what may not currently be available. By clearly articulating the organization's needs, defining explicit roles, and establishing a model for enterprise innovation, an insurer can address any underlying concerns it may have about partnerships.

To have a better idea of the implications of the talent challenge, insurers again need to keep in mind that innovation in insurance is coming from outside the industry. Accordingly, we expect many talented professionals without insurance-specific skills will be the ones who wind up driving innovation. (As a case in point, an industry outsider determined how Uber drivers could obtain adequate coverage[1].)

[1] https://www.buzzfeed.com/williamalden/meet-the-guy-who-solved-ubers-insurance-problem

Cyber risk and regulation in the innovation agenda

Results from our latest Global Fintech Survey show that IT security and regulatory uncertainty are top issues for insurance innovators. Interestingly, while incumbents are much more concerned about cyber risk than new entrants, emerging InsurTechs often struggle to address regulatory challenges that frequently are part of incumbents' business as usual. And, differing perception of cyber and regulatory challenges is one of the main areas of potential discord between established insurers and new players.

Accordingly, both cyber risk and regulation are an essential part of the innovation agenda. This requires including appropriate cyber-risk and regulatory specialists in the development of the enterprise innovation model. They will be most helpful as facilitators (not inhibitors), taking into consideration the following.

Cyber risk in "insurance as a platform"

The emerging concept of "Insurance as a Platform (IaaP)" (which follows on "Banking as a Platform (BaaP)") has several implications related to the connectivity and interoperability of desirable InsurTech solutions, which often rely on emerging technologies that challenge established IT security rules.

New risk exposures and uncertainty about the effectiveness of existing measures to protect against them can lead to decisions that will not be sustainable in the new insurance ecosystem. Even incremental innovation is posing challenges. For example, cloud-based solutions often push the boundaries of the existing corporate IT infrastructure. While industry response has been adequate so far, what works today may not be scalable to new, breakthrough platforms.

One of the main reasons why InsurTech is developing so rapidly is the sector's ease of access to start-up technology, which often relies on cloud computing. Accordingly, partnering with or acquiring InsurTech companies means that the incumbent's traditional IT boundaries are likely to stretch more and more with each new venture.

Insurers have the opportunity to define and develop their IT security rules and build the appropriate architecture to integrate different InsurTech partners. This will enable them to bridge existing gaps and facilitate collaboration and partnerships with emerging start-ups. Likewise, start-ups have the opportunity to work closely with incumbents to identify potential cyber risks up-front and effectively manage them when scaling solutions.

Collaboration to modernize regulatory frameworks

New market entrants traditionally have bought out legacy or run-off carriers in order to obtain proper licenses. This typically results in a "compliant" but still traditional insurer.

Insurance regulations and licensing laws present significant barriers to entry to InsurTechs. For an insurer to properly scale, a sizeable balance sheet is needed to elicit trust that it 1) will be around in the future to pay claims; and 2) meets minimum capital requirements based on the amount of risk it has taken on. And, while holding risk on a balance sheet is not a common practice for start-ups, it's a staple for incumbent insurers.

Despite these barriers, start-ups have seen opportunities that go beyond intermediation, and their minimally viable products will have to meet appropriate regulatory requirements (some of which may come into existence only after a new product is viable enough for regulators to assess). However, start-ups are geared toward rapid innovation, and do not always consider that regulatory and compliance issues or violations, in fact, can arise later.

Cyber risk and regulation in the innovation agenda

Non-compliance is not an option; it typically leads to management shakeups and results in financial burdens such as fines and decreased business resulting from reputational damage. While incumbents usually can survive such blows, they certainly want to avoid them. Start-ups often do not survive if they run afoul of regulators, and in heavily regulated industries like insurance, they need to be cognizant of real and potential compliance issues and plan accordingly.

Today's customers are demanding new insurance products that require new regulation. Effective changes will come from collaboration between insurers and regulators, but with full and open consideration of emerging players' points of view. Incumbents will need to remain familiar with new models (e.g., sharing economies and peer-to-peer) and anticipate their potential regulatory implications.

In other words, established insurers have to play a double role. First, they have to leverage their experience and connections with regulators to meet existing regulatory requirements and avoid undesirable outcomes (Zenefits[2] is a cautionary tale). Second, they have to identify potential new regulatory challenges that may emerge in the future. In this context, incumbents shouldn't disregard the views of new entrants (who may not be savvy about insurance regulation), but work with them to develop a fresh approach to protecting the customer. While doing this, they also need to avoid interfering with or even blocking the innovation process. We recognize that this is a fine line to tread, but successful innovation ultimately depends on it.

[2]http://www.bizjournals.com/sanfrancisco/blog/techflash/2016/02/zenefits-scandal-spreads-regulators-hr-tech.html

Final thoughts

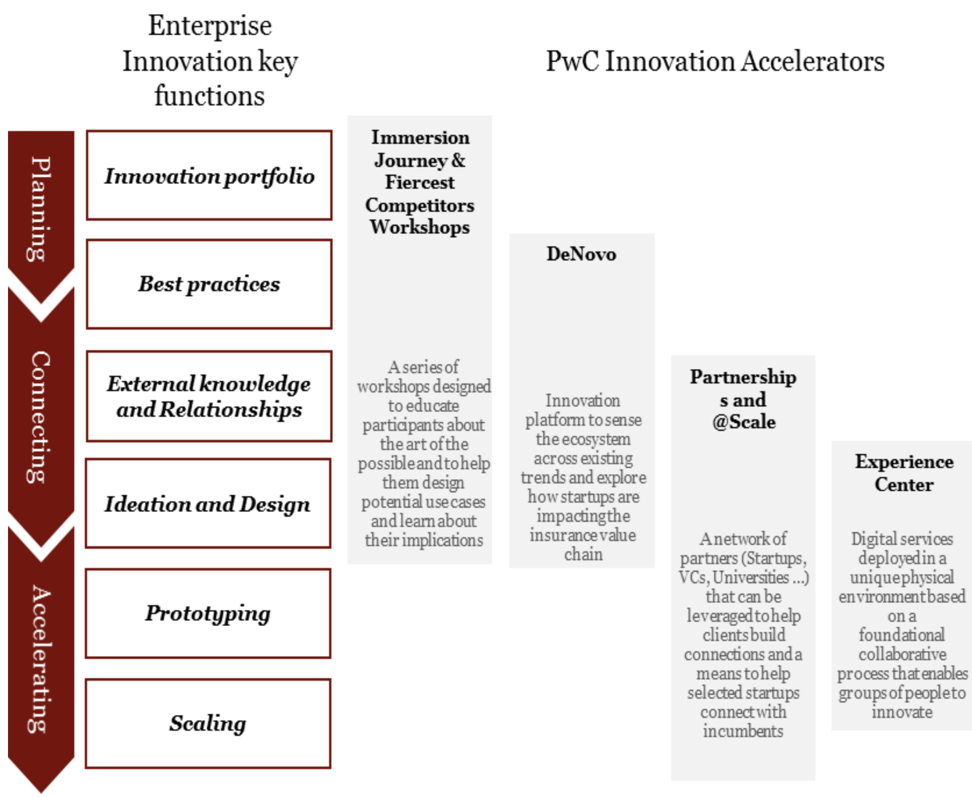
In a fast paced digital age, insurers are balancing InsurTech opportunities with the challenge of altering long-standing business processes. While most insurers have embraced change to support incremental innovation, bigger breakthroughs are necessary in order to compete with the new technologies and business models that are disrupting the industry.

Insurance leaders' innovation agenda should include the following:

- Scenario planning – what are the potential future scenarios and their implications?
- Real-time monitoring and analysis of the InsurTech landscape.
- Determining how to promote enterprise innovation, including combining different approaches of accelerating and enabling execution.
- Augmenting the organization with new and different types of talent.
- Cyber security and regulation.

Insurers must start by addressing their innovation needs and assessing how prepared the organization is to cultivate innovation. Once there is a clear idea of the organization's strategic goals and a suitable appetite for change, insurers can start planning how to maintain awareness of promising new trends and potential future scenarios. Lastly, insurers must decide how they plan on interacting with technology start-ups and their plan for linking to the InsurTech industry.

These decisions will inform how the company approaches innovation, any talent gaps that may exist, and the most promising opportunities. Most importantly, the resulting insights can help insurers translate knowledge of disruptive forces into strategic, actionable plans for competitive innovation.



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