

EMBEDDED INSURANCE

For Tech Platforms



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Executive Summary

Companies are increasingly offering insurance or protection alongside their products. Today's consumers expect and value convenience above all else. By interacting online with companies (perhaps like yours) they provide a host of data about themselves and their behaviors. As a result, companies (perhaps like yours) can now offer embedded insurance alongside their products in new, and novel ways.

These insurance or insurance-like products can drive significant profitability for their sellers, in two ways. First, many customers are still reluctant to make significant purchases (online or offline) and protection increases conversion rates, generating additional business. Second, the product themselves could have a high margin and, if managed well, could significantly increase profitability of the offerer.

The challenge to offering embedded insurance is developing the infrastructure and wherewithal to offer it. Insurance and protection-related products are highly regulated, and the seller not only needs to embed the purchase flow in their consumer-facing application, but also they need to manage claims and the program overall. That is where Tint comes in, the leader in embedded insurance, with simple to implement APIs, insurance experts on staff, and a powerful infrastructure and dashboard to speed time to market and enhance profitability of your embedded insurance program.



Who are we?

We are Matheus Riolfi and Jérôme Selles, insurance experts and co-founders of Tint. Previously we implemented the embedded protection program at Turo, the leading car-rental marketplace. We, combined with our team, have decades of experience not only in insurance but also in product management for leading B2C and B2B companies.

Who is this for?

This eBook could be valuable for anyone, from business students to investors, however that isn't our audience. Our people are builders—founders, CEOs, product and risk managers, engineers—who are considering embedding protection and want to understand it at a deeper level. While we will focus to a necessary extent on the financial implications of embedded insurance, our goal is to dig into the how and why so that you as a decision maker can make the best decision possible.

Do we want you to choose to embed protection? Only if it's right for your business.

What is embedded protection?

Embedded protection, or embedded insurance, is a financial product that is sold alongside another product that reduces the purchaser's risk. For example, when you purchase a television from BestBuy or Amazon.com, frequently you are offered a protection plan—this is embedded protection.



When you book with Airbnb or Booking.com, you might be offered some form of insurance—also, embedded protection. When you list your vehicle on Turo or Outdoorsy, or rent a vehicle from either platform, you might choose to reduce your risk by paying a bit more for embedded protection. Embedded protection protects the buyer, at some small cost to them, from risks that may occur as a direct result of their purchase.

Embedded protection is not necessarily insurance. This detail can be quite important from a regulatory point of view because regulations around insurance can make implementation of a program more complicated. It may take time to get licenses, require additional corporate entities, or require regional approvals. We'll cover this complexity later, in context, but be aware that some things that seem straightforward might be impacted by the regulatory environment around insurance.

Embedded protection has a major advantage: data. The issuer of the policy tends to be the website or application where the purchase was made. Unlike your legacy insurer, who might be passed a handful of data points, the website usually has rich data about any purchaser—ranging from past purchase history to location, website browser, type of device, and specific browsing patterns. This makes underwriting generally safer, as richer data enables the issuer to more easily avoid fraudsters and other bad actors.

The improved data environment conveys a critical advantage on the issuer—they are better positioned than a traditional insurer to provide the protection. They can do so, on average, at a lower cost. And, critically, with less friction—just check a box when you purchase, and your purchase is protected. No consumer in today's environment wants to go to another website and fill out additional forms, and then wait. To offer a competitive or even superior product with less friction is to win before the game has even started.



What kinds of
**EMBEDDED
PROTECTION**
exist?



Traditional Insurance

Traditional insurance exists in mature protection markets where the risks are well known, volumes are extremely high, and a market for both insurance and reinsurance exists already. For example, if you go to an airline website and book a ticket, you'll be presented with an offer for trip insurance. This is a large, existing market with several large insurance players owning significant market share. If you are an airline company and do sell this, you might partner with AIG. AIG would issue the policy, and then possibly reinsure part of the liability to a reinsurer (for example, SwissRe). Other examples of this type of mature market include [Carvana distributing auto insurance products from Root.](#)

If your product exists in a space with significant traditional insurance options, embedding protection becomes more of an optimization problem than a creation problem. In this context, as the products are mature and probably well priced, you will be looking for ease of implementation to get to market quickly. And, future proofing your implementation so that, for example, you can swap out insurers when one becomes too expensive or display quotes from multiple insurers. (For those new to insurance, some insurers can become dramatically more expensive than their competitors for a nearly identical policy due to what has happened recently in their risk portfolios.)

New Protection and Insurance Products

For newer markets—say, short term rentals—there are not preexisting insurance products, so you may want to create a new one. This is where we spend most of our time, as it requires the most product, technical and insurance expertise. Here, you will offer a protection plan to your end customer, and then track and fulfill that plan on your side. For these products, you have two main decisions to make:

➤ Transfer vs. self-insurance

You could choose to offload that risk to an insurer, which means partnering with an insurer so that you've packaged up a risk that they are willing to buy, or you could self-insure. The transfer process can be relatively quick if you know what you are doing—which is why many partner with Tint, because we do this every day for top companies.

In the case of self-insurance, you create a new insurance product that is highly profitable, but instead of passing it onto other insurers to spread the risk, you decide you want to capture all the profit by carrying the risk on your own balance sheet. You segregate the risk to a mini insurance company called captive or captive cell 100% controlled by you. Many of our partners who begin by creating an insurance product and selling it on to other insurers will eventually bring the product in-house and become a captive insurance provider. This has the biggest profitability impact, and gives you more control and operating flexibility as you no longer have to deal with an outside insurance partner. It comes with greater responsibility, as bigger losses would hit your balance sheet directly (though reinsurance may be used to protect against this, which we discuss below).

➤ Fully embedded vs. add-on

Another important decision is whether or not you want to charge extra money from your end users for the protection you offer. Some companies, like Airbnb or Uber, offer the insurance as part of their product so end users don't even see it or have to make a decision about it. For example, anyone booking a stay on Airbnb is automatically covered. We call this fully-embedded.

Other companies such as Turo, Outdoorsy, and Deel provide different product tiers that come with protection at different levels and charge users different prices for it. End-users are not required to purchase protection, so we call this add-on. The optional "damage waiver" you see in many places—from car rentals to ski or bike rentals—is one such example.

Both scenarios have different legal implications and pros and cons, so the right answer depends on your goals and use case. Fully embedded offerings have fewer compliance requirements and provide value to all customers, but results in higher prices that can reduce conversion (if the customers do not see the value). Add-on protection has higher compliance barriers but provides more flexibility for users. It also keeps prices competitive in the market, while offering an upsell opportunity for less price sensitive customers who value protection.



Choosing the best structure

There are trade offs that are unique to each program and each company. Having an expert to navigate those tradeoffs is essential to success. Just as important is implementing your program so that you can grow. For example, many companies start with a more traditional insurance approach, using a partner. As they grow, they might move this in-house to a captive program. As that grows, and the risk to their balance sheet increases, they may add reinsurance—where you essentially insure against losses, without that reinsurer having to work with or have exposure to your end users. And this may be implemented differently in different states, countries or regions where the regulations affect the offering.

Navigating the tradeoffs of different approaches is easier with a partner, like Tint, who knows insurance well. That can enable you to start on a solid foundation. The same is true of using a platform like Tint to implement your program: it enables you to have the flexibility you will need as you grow, while reducing any upfront costs to getting started.

Why implement embedded insurance?

Each company approaches the decision from its own cultural perspective, which generally fall into three categories. First, many companies care about profitability. Second, many companies care about their customers. And finally, many companies care about keeping ahead of the competition. We'll address each motivation in turn.

Embedded insurance can increase profitability in two primary ways. First, it can convince some prospects to buy who otherwise would not have bought, increasing revenue of your core service and conversion on your website or application. Second, the program itself is usually highly profitable. Margins can range from 70-90% for captive programs (net of claims), depending on a variety of factors. This means that you are able to drive direct profitability and enterprise value from offering embedded insurance.

Many companies realize that by offering protection they enhance the experience for their customers. This takes two flavors. For some, it is meeting a customer need that couldn't be met elsewhere. In this case, customers seek out protection elsewhere—for example, short term rental customers might buy an alternate, inferior protection through a traditional insurance carrier (or worse, be denied it!). Or cryptocurrency participants look (and fail to find) insurance for their activities outside the crypto/web3/defi ecosystem. Those consumers look to the companies in the ecosystem to provide the service they either cannot get elsewhere, or cannot get at a reasonable price.

For industries where protection is available elsewhere, many companies realize that it is inconvenient for their customers to go get it, or perhaps it is an inferior product with drawbacks. By embedding the right protection for their customers, these companies enhance their customers' experience and save them time. Frequently, it also saves the customer money—while increasing profitability for the company offering the protection.

Finally, from a company's perspective, there is competition. Embedding insurance can enhance market position in two ways. First, prospective customers can see that you offer a more complete product, as evidenced by higher conversion rates amongst prospects who would not have converted without protection. This is a 'feature' that customers value and can sway people away from your competitors. Second, embedding protection can keep you ahead of the competition—forcing them to match your features (or continue to lose customers) while you benefit from enhanced profitability and a head start on data for underwriting and product development.

There are a variety of good reasons to implement embedded protection. For some, it's a profit motive that drives the decision. For others, it is a focus on the customer—providing a service they can't get elsewhere, or offering a better service more conveniently. Finally for some it is a competitive move, creating a larger moat.

Playbook to implement embedded protection

Embedded protection requires several steps to implement. Like any product launch it requires a bit of forethought, but if you are working from a playbook (like this one!) it can be easy to manage.

Step 1 >

Understand the customer need

Customers may have trouble articulating what they want or need from a protection product, but a good product manager—armed with examples and case studies from related industries—can understand exactly what a product needs to have. In some cases, like those discussed below, the person responsible for implementing protection (risk manager, executive, or product manager) may well be a customer and therefore knows firsthand what the concerns are. In other circumstances, interviews and data analysis are the best approach.

Focus groups and customer interviews are excellent tools to understand what concerns are on your customers' minds that you might be able to address with protection.

Step 2 >

Design the protection product

Starting with your customer's needs, design a product to protect against the risks that concern them. This usually requires legal input if you are working in an area without any existing products. If, on the other hand, this is a well traveled industry an insurance insider (like Tint) can help you understand the contours of the landscape and help you design a product that can be insured and reinsured, if needed. Consider at this stage whether your balance sheet would support a captive product ([see captive insurance](#)).

Step 3 >

Self-insure or secure one or more insurance partners

Customers may have trouble articulating what they want or need from a protection product, but a good product manager—armed with examples and case studies from related industries—can understand exactly what a product needs to have. In some cases, like those discussed below, the person responsible for implementing protection (risk manager, executive, or product manager) may well be a customer and therefore knows firsthand what the concerns are. In other circumstances, interviews and data analysis are the best approach.

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Step 4 **Implement the product**

Implementation has two major components: front end and back end. The front end implementation requires taking your insurance offering and applying it to where your customers interact with your existing products or website. This could be as simple as saying “Up to \$1 million insured”, or it could include dynamically adding risk-adjusted pricing for protection. For example, a 1-night rental might command a much higher risk than a week-long rental, and you would need APIs like Tint’s, capable of providing real time pricing.

The back end is where both calculations happen and management happens. The back end work comprises the decision tools, data modeling for risk, the pricing models; the claims management, and the infrastructure to switch between insurers. All of this comes ready to use with Tint, however some companies have built legacy solutions.

Implementation can be the longest phase. Companies leveraging Tint may go to market in 1-2 months. Building the necessary back end and front end infrastructure from scratch could take as much as 6-12 months if you are starting from scratch.

Step 5 **Launch**

Launching is the fun part! Deploy your new front end updates to production where customers can interact and begin to purchase protection. You can then manage and track the success of your program in dashboards so that you can both measure the impact and continually improve. Frequently this means expanding your product across more of your business, after piloting it in a subset of your transactions.

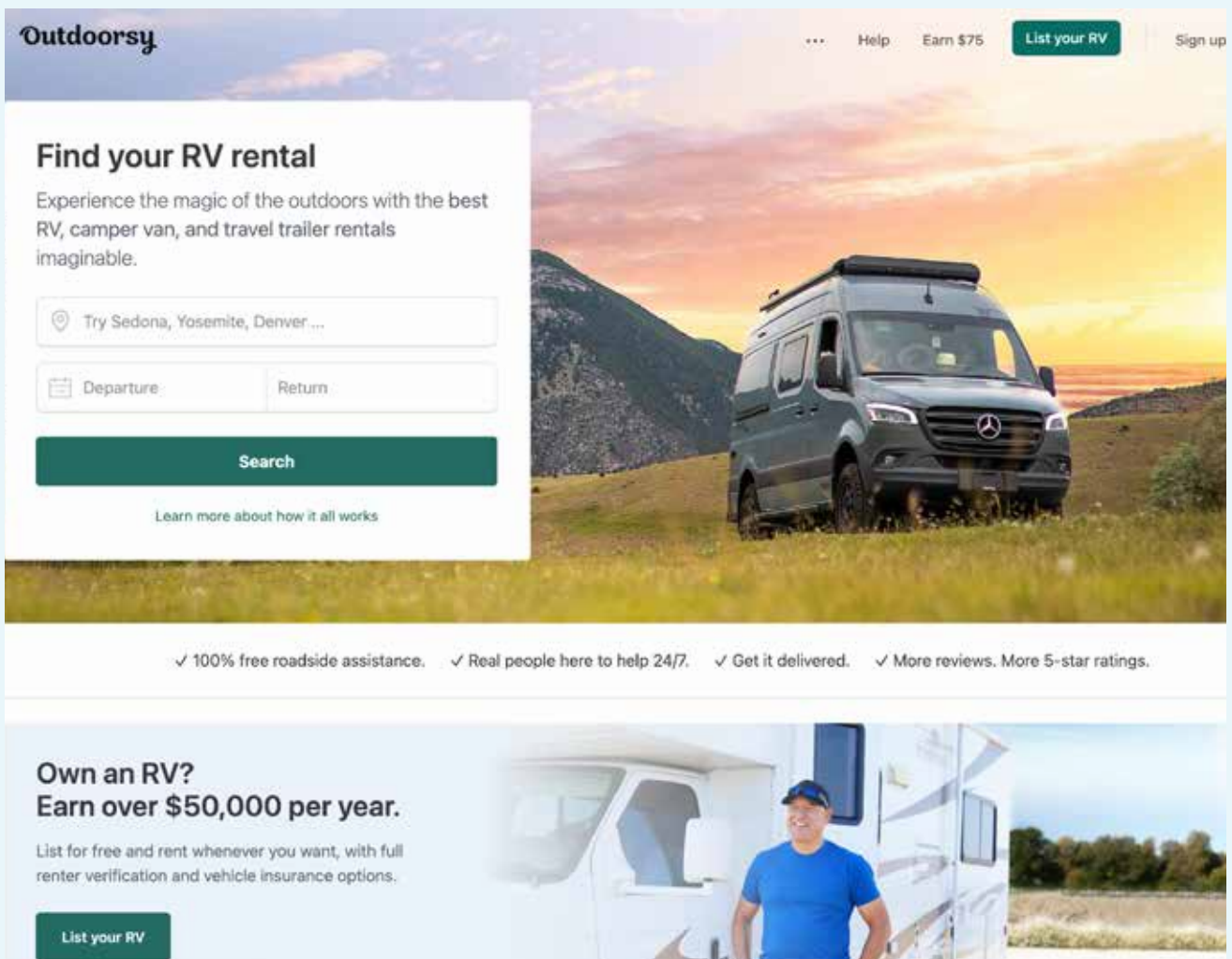


What are examples of embedded protection?

The best way to understand embedded protection from a consumer's standpoint is to go look at companies offering it. Here we'll dive into examples, and give you some insights on what is happening to enable these products from the company's side.

Outdoorsy

Outdoorsy is the first peer-to-peer marketplace to disrupt the \$32B recreational vehicle industry. The company connects passionate RV owners with qualified renters and makes it easy and safe for them to transact. It has the most comprehensive platform for outdoor travelers to rent RVs in different countries.



The screenshot displays the Outdoorsy website interface. At the top, the Outdoorsy logo is on the left, and navigation links for Help, Earn \$75, List your RV, and Sign up are on the right. The main section is titled "Find your RV rental" and includes a description: "Experience the magic of the outdoors with the best RV, camper van, and travel trailer rentals imaginable." Below this is a search form with a location input (pre-filled with "Try Sedona, Yosemite, Denver ..."), departure and return date inputs, and a green "Search" button. A link "Learn more about how it all works" is positioned below the search button. The background of the search section features a large image of a grey Mercedes-Benz camper van parked in a grassy field at sunset. Below the search section, a horizontal bar lists four benefits: "✓ 100% free roadside assistance.", "✓ Real people here to help 24/7.", "✓ Get it delivered.", and "✓ More reviews. More 5-star ratings." The bottom section is titled "Own an RV? Earn over \$50,000 per year." and includes the text: "List for free and rent whenever you want, with full renter verification and vehicle insurance options." A green "List your RV" button is located at the bottom left of this section. The background of the bottom section shows a man in a blue shirt standing next to a white RV.

Outdoorsy leverages protection for its owners, and for individual renters as a 'damage waiver' product. These products feature prominently in the sales materials and onboarding in both cases, as the risks are an important consideration for their customers.

Own an RV? Earn over \$50,000 per year.

List for free and rent whenever you want, with full renter verification and vehicle insurance options.

How much could you earn?

Select vehicle type

Get started

This site is protected by reCAPTCHA and the Google [Privacy Policy](#) and [Terms of Service](#) apply.

Benefits of renting your RV on Outdoorsy

Rent your RV today and earn up to **\$50,000 per year!**

- ✓ **Be in control**
Set your rates and control your RV rental schedule
- ✓ **Earn money**
Earn extra cash to help pay off your rig or fund your next adventure
- ✓ **Join a passionate community**
Our owner community offers advice for new owners
- ✓ **Every trip is covered**
Every rental is covered with up to \$1 million liability insurance and free roadside assistance
- ✓ **Get paid quickly**
Money hits your bank account within 24 - 48 hours of trip departure
- ✓ **Verified renters**
Our comprehensive driver verification ensures your rig is in good hands

As a marketplace Outdoorsy benefits from excellent data on both sides—renters demonstrate their risk levels both through not only basic data but also browsing patterns and past rentals. Similarly, Outdoorsy has much better data available on vehicles than simple DMV and other manufacturer data.

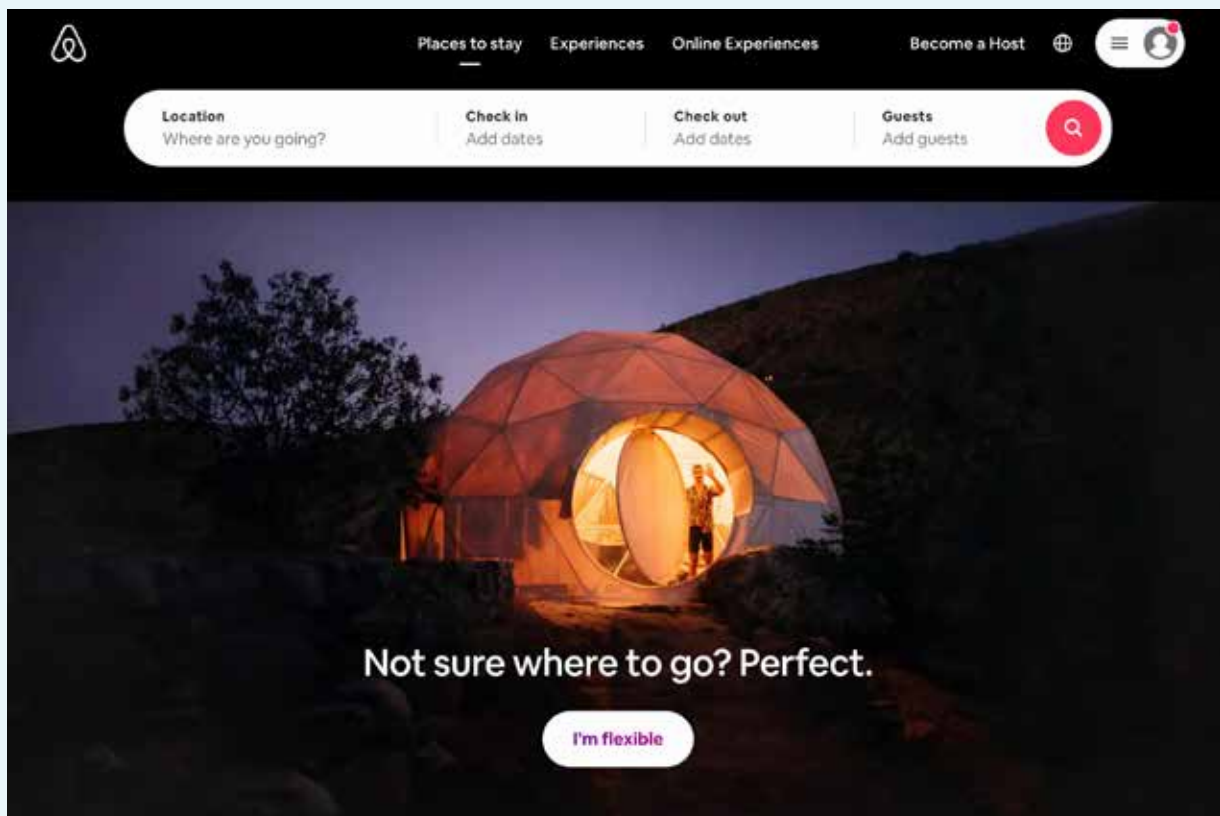
Outdoorsy focused its efforts on generating an AI-powered risk score. This score combines multiple data streams including users, transactions, messages, in-website/app events, customer support interactions, and claims with hundreds of external attributes into comprehensive AI models.

By partnering with Tint for these AI risk models, Outdoorsy reduced 11% of their losses with almost no impact on revenue. The Tint API was integrated on Outdoorsy's product in less than one month and Tint started to power the risk assessment of all transactions booked in the marketplace.

Outdoorsy depends on embedded insurance to enable its marketplace to function. Without it, owners would be reluctant to list and renters would be reluctant to rent. This is a good example of a market where the right protection product simply isn't available outside of the marketplace, and therefore Outdoorsy had to step in and offer it. Partnering with Tint just made that far easier than going it alone.



Airbnb is a peer-to-peer marketplace enabling anyone to rent out their dwelling—house, apartment, room, or even yurt—to visitors, and for those visitors to explore and connect with the world. For any host (Airbnb's term for the person who controls the asset being rented), the risks are high. Traditional home insurance frequently does not cover short-term rentals, and while Airbnb has invested heavily in trust and safety, at global scale things can and will go wrong. Embedded insurance is the solution.



Airbnb built an embedded protection program that has become a major selling point to hosting on Airbnb. They invested so much in it, they even branded it—"aircover". The program covers a variety of things that can go wrong, ranging from insurance (for bodily injury) to damage protection.

aircover

Top-to-bottom protection.
Free for every Host. Only on Airbnb.

\$1M liability insurance

You're protected—even in the rare event that a guest is hurt.

\$1M damage protection

We cover damage by guests to your space and belongings, including valuables.

Pet damage protection

Not to worry: unexpected damage done by four-legged guests is covered.

Deep cleaning protection

We compensate you for unexpected cleaning costs.

Income loss protection

Airbnb reimburses lost income if you cancel confirmed bookings due to damage.

14-day filing window

You have 14 days to report damage—even if you're booked back-to-back.

Quicker reimbursements

Hosts get faster reimbursements for guest damages (9 days on average).

Faster track for Superhosts

Superhosts get access to a dedicated support line with priority routing.

Airbnb's embedded protection applies to all hosts—reducing the costs to Airbnb and protecting even those more risk-seeking (or cheap) hosts who don't expect something to happen, but would blame Airbnb if it did. This would risk lawsuits and poor customer reviews. By offering what we call **"fully embedded protection"** Airbnb bundles this critical product for all hosts.

As you can see from the screenshot above, Airbnb has found that support and fast payouts are critical to the success of the program. Airbnb highlights "Quicker reimbursements" of 9 days on average, ensuring that any loss can be made right quickly. This kind of speed may not be possible working with an insurance partner, but can be easily achieved with the right operational infrastructure (like Tint) and a captive program.

By specifying the various types of incidents that the protection covers, Airbnb gives hosts peace of mind in two ways. First, if the prospective host has a concern that something might happen—for instance, damage would force them to cancel reservations and cost them income—Airbnb shows that it addresses the issue specifically. Second, it shows to the uninformed host who doesn't have any specific concern that Airbnb has thought of a lot, and that therefore were an issue to arise, Airbnb would cover it.

Finally, Airbnb leverages their embedded protection as a competitive advantage, calling out their protection as it compares to their competition.



	Airbnb	Competitors
\$1M liability insurance	✓	✓
\$1M damage protection	✓	✗
Pet damage protection	✓	✗
Deep cleaning protection	✓	✗
Income loss protection	✓	✗
14-day filing window	✓	✓
Quicker reimbursements	✓	✗
Faster track for Superhosts	✓	✗

AirCover benefits compared to those offered for free by our top competitors.

It's easy to see the importance of AirCover in Airbnb's overall strategy to acquire and retain hosts on its platform. By growing the host pool and retaining hosts on the platform, Airbnb is able to offer more options to guests and generate more income for itself as well.

Many people would be—rightfully—reluctant to rent their home, apartment, or even yurt to a total stranger. Airbnb addresses this reluctance with a well considered protection product that covers most likely issues a host might encounter, increasing the conversion of prospective hosts into actual hosts, and ensuring that a host with a bad experience is financially covered so that they can continue to list on the platform. Airbnb leverages this program to compete with other offerings, knowing that it has significant advantages and hosts realize that and choose Airbnb over competitors as a result.

What are the risks or pitfalls of embedded protection

Companies that implement embedded protection thoughtfully have little to worry about. This means they need to be mindful of the regulatory environment and plan for it, as well as manage the risks inherent in any insurance-like product at the underwriting stage. Working with Tint can protect against risks like these.

For companies doing a DIY-style embedded protection, without the help of Tint, there are several risks.

Customer Experience



Embedded protection significantly enhances your product when done well. However, it can create detractors if the program is not working as expected. Imagine a customer that purchased protection and filed a claim that was denied because the company couldn't find a record of the policy. Do you think this customer would be a promoter or a detractor? Like any other product your company offers, protection has to be executed well and delivered seamlessly to gain brand loyalty, repeat custom and word of mouth.

The complexity of creating and delivering a well managed protection program makes it important to get expert guidance and tools to run the program as smoothly as possible.

Underwriting



Underwriting insurance means making the decision whether or not a risk is acceptable, and if so, pricing that risk. A company with little experience in the insurance space incurs risk in both directions. They might pass on risks that are insurable, losing revenue. They might insure risks that are higher than they expect, costing them higher claims and profit. They might misprice the risks, either hurting profitability or reducing uptake—possibly hurting their overall conversion.

By partnering with an expert like Tint, not only do you start with the infrastructure to go to market quickly and experiment as needed, but also you have market data and deep industry expertise to ensure you're starting from the best point. Dashboards and reporting then enable you to fine tune your underwriting so you are always managing your embedded insurance program profitably.

Tech Implementation



Like any feature release, embedded protection requires planning and design. It may require more than your typical release, as you navigate the regulatory environment around what you want to offer, what is possible to offer, and how you are allowed to message that to your customers. Significant delays are possible if you approach this without expertise.

If you are rolling your own insurance infrastructure, you then will need to build bank-level security and accuracy into a suite of services ranging from policy origination, policy and claims management, and financial reporting. This can frequently exceed the work required to embed the insurance in the front end, if you are not leveraging an existing platform.

Tint has insurance experts on staff to speed the design and planning phase along. We also have all of the infrastructure needed to offer the product (using APIs and other tools) and manage it, with dashboards and reporting (and more APIs as needed). The combination ensures that you get your new product designed and in market as quickly as possible, with minimal chance of delay or issue.

Regulatory



As a consumer, it is easy to understand why insurance is regulated. You pay premiums over time, and the insurer collects those premiums. Then if something bad happens, you make a claim against your policy and are paid. If the insurer can collect premiums without ever paying out claims, they become even more profitable. So, regulators stepped in to ensure this does not happen.

The regulatory framework is differentiated based on the product being insured, or the specific kind of insurance or protection being offered. In the US each state has a different legal code for insurance. The variations and complexity are well beyond the scope of this book, but we encourage you to either talk to our experts, or a lawyer of your own, in order to assess your specific use case. Just reach out at tint.ai for a consultation.

Risks Summary



There are many risks associated with offering embedded insurance or protection, some of which having significant impacts on sales and customer experience. However all of those risks can be mitigated by working with an expert and platform such as Tint. In fact, by working with Tint, you make your product a lot more appealing to your customers. While there might be risks to offering embedded protection, working with a provider like Tint mitigates those risks.

Conclusion

Embedded protection or embedded insurance enable anyone selling products digitally to enable their customers to protect their purchase. The protection could be insured by an insurer—and even re-insurers—or it could be held on the balance sheet, in what's called a self-insurance model. Either way, the customer gets the protection they want with the modern convenience they are used to and expect from sellers of products online. The seller gets a very high margin business in the protection itself, plus additional conversions because reluctant buyers might be convinced to purchase only if protection is available.

Building an embedded protection program from scratch can be daunting without expertise and infrastructure. That is why we started Tint—to provide the expertise and infrastructure needed to build embedded protection into all products sold on the internet, today and in the future. If you are interested in learning more, please visit tint.ai.

