

CONSUMER SECURITY AND PRIVACY ATTITUDES IN A POST-COVID WORLD

F-Secure research whitepaper for insurance companies



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WHY CONSUMER SECURITY AND PRIVACY BEHAVIOR ARE RELEVANT FOR INSURANCE COMPANIES

Non-insurance services have become pivotal for creating value for customers and positioning insurers in the competitive market. Digital security coupled with insurance services makes a compelling offering because both appeal to the universal human need for safety.

Digital transformation has changed people's online behaviors and attitudes towards security. Our research

highlights what matters most to consumers, where they need help, and what their purchase preferences are.

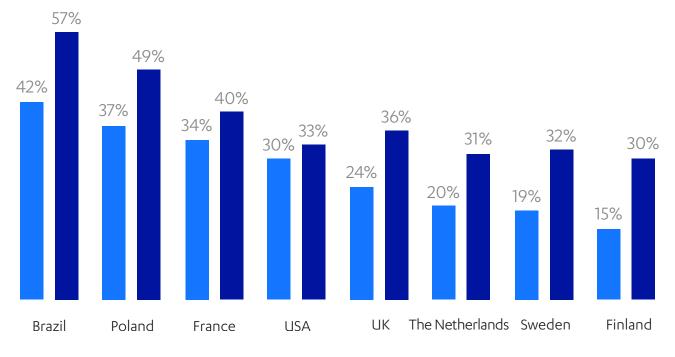
In this whitepaper, you will learn how the pandemic has impacted consumers' online security and privacy behavior and attitudes, and how you can seize the new opportunities that have arisen.

DIGITALIZATION: THE BOOM AND THE GLOOM

The COVID-19 pandemic triggered a global digitalization leap that changed our lives – the way we work, study, shop, and interact with each other. As countries went into lockdown, many consumers were prompted to learn new digital skills and were introduced to various technologies, products, and online services for the first time.

According to McKinsey*, consumers and companies covered a "decade in days" in terms of digital adoption. Online deliveries saw 10 years' worth of growth in just eight weeks. Telemedicine grew by 10 times in 15 days, and there were 20 times more participants on videoconferencing platforms in the space of three months.

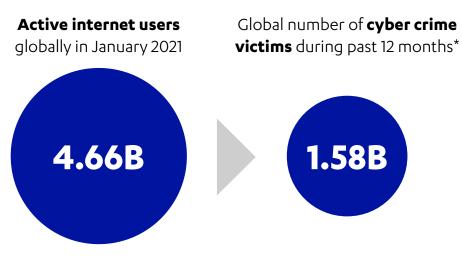
The sudden masses of consumers using online services created opportunities for cyber criminals. With consumers' elevated levels of online exposure, and with more sensitive information being transacted online than ever before, attackers have more opportunities to digitally victimize people, especially given the glut of new and thus more vulnerable users.



CYBER CRIME HAS INCREASED DURING THE PANDEMIC IN NEARLY ALL COUNTRIES

Recent research bears this out. According to F-Secure, the percentage of consumers reporting they experienced a security incident in the previous 12 months jumped from 29% in 2020 to 34% in 2021. Put into the context of active internet users, 34 percent amounts to 1.58 billion victims of cyber crime.

CYBER CRIME INCREASED FROM 29% TO 34% IN ONE YEAR



*Hypothetically, if 34% would represent the global share of victims of cyber crime

*Source: McKinsey, How COVID-19 is changing consumer behavior – now and forever, July 30, 2020 https://www.mckinsey.com/industries/retail/our-insights/how-covid-19-is-changing-consumer-behavior-now-and-forever

YEARS OF CONSUMER RESEARCH

Since 2014, F-Secure has surveyed consumers about their attitudes and behavior related to online security and privacy. Over four waves of research, we have interviewed over 27,000 consumers. In addition, we have conducted research related to specific themes such as identity protection and product packaging. This report summarizes the findings of our latest study, conducted in June 2021, and compares those findings with those of our previous studies, conducted in 2015, 2018, and 2020. In these comparisons, we have used data from countries that were included in all studies: Brazil, France, Germany, the UK, and the USA.

	"WAVE 1"	"WAVE 2"	"WAVE 3"	"WAVE 4"
	(2014)	(2015)	(2018)	(2021)
Country coverage	6 countries: USA, UK, Germany, Brazil, Philippines	11 countries: USA, UK, Germany,France, Brazil, Sweden, Mexico, Argentina, Columbia, India, Italy	8 countries: USA, UK, Germany,France, Brazil, Mexico, Sweden, Japan	9 countries: USA, UK, Germany,France, Brazil, The Netherlands, Mexico, Sweden, Japan
Sample size	6 countries x 800	11 countries x 800	8 countries x 800	9 countries x 800
	respondents - 4800	respondents - 8800	respondents - 6400	respondents - 7200
	respondents	respondent	respondent	respondent

F-SECURE CONSUMER SURVEYS

ONLINE ACTIVITIES INVOLVING MONEY ARE ON THE RISE

There's no doubt the pandemic accelerated the adoption of digital skills. Many of these new skills and behaviors can be expected to stick. F-Secure's latest research highlights certain behaviors that have seen increases since the onset of the pandemic.

One third of the respondents to our study said they have used their mobile phone or tablet to make **online purchases** one to three times a week. This is an increase from 18.3% in the pre-pandemic study of 2018. Online purchases using a computer have climbed from 23% in 2018 to 31% in 2021.

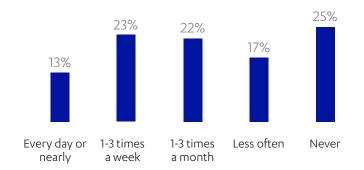
Mobile banking is another area where a clear COVID effect is visible. In 2021, 47.4% of respondents had used their mobile phone or tablet for online banking one to three times a week, up from just 26.4% in 2018. While mobile banking has soared in popularity, desktop banking has also surged and increased from 32% in 2018 to 41% in 2021.

INCREASE IN MOBILE SHOPPING AND BANKING

Online purchasesOnline bankingImage: Contract of the second seco

36% of the respondents use mobile payment (e.g., Apple Pay, PayPal One Touch, Samsung Pay etc.) every day, or at least one to three times a week. A heightened consumer interest in online shopping, banking, and mobile payments has also resulted in greater awareness of digital security threats and the security solutions that combat these dangers.

USING MOBILE PAYMENT (E.G. APPLE PAY, PAYPAL ONE TOUCH, SAMSUNG PAY ETC.)

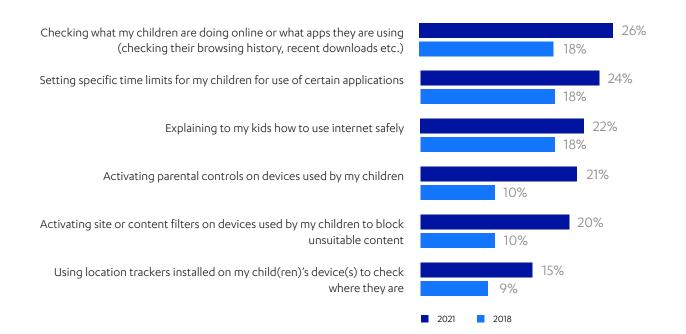




PROTECTING CHILDREN ONLINE WITH TECHNOLOGICAL SOLUTIONS

Remote learning and the need to keep kids entertained during lockdown have increased children's usage of digital devices. Our research also shows that **keeping children safe online** has become more important for consumers who have kids: Usage of parental controls and content filters has doubled from pre-pandemic levels. Monitoring children's internet usage has expanded from 18% in 2018 to 26% in 2021. Screen time limits have become a crucial tool for parents to maintain a healthy balance between children's online and offline activities. Even though digital parenting is on the rise, our research also shows that parents are spending more time explaining to their children how to use the internet safely.

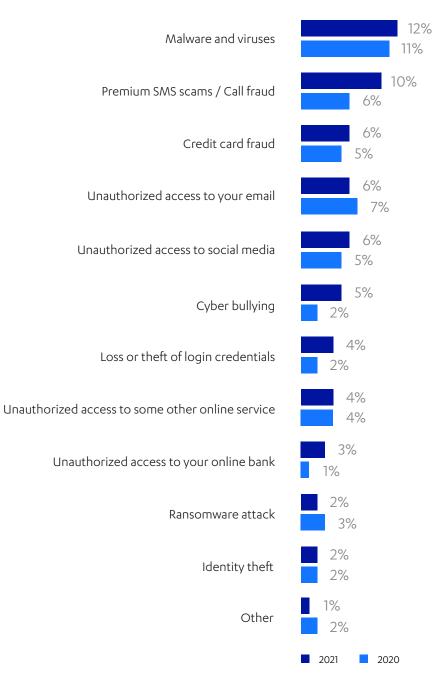
GROWING IMPORTANCE OF KEEPING KIDS SAFE ONLINE



THREATS AND ATTACKS STILL ABOUND

Digitalization may have forced some consumers to learn new skills, but cyber criminals have been honing their tactics in the online world for decades. **Malware and** **viruses** are still the most dominant threat, with new variants introduced daily. We see increases in threat categories nearly across the board.

TRADITIONAL MALWARE AND FINANCIAL MOTIVES DOMINATE THE THREAT LANDSCAPE



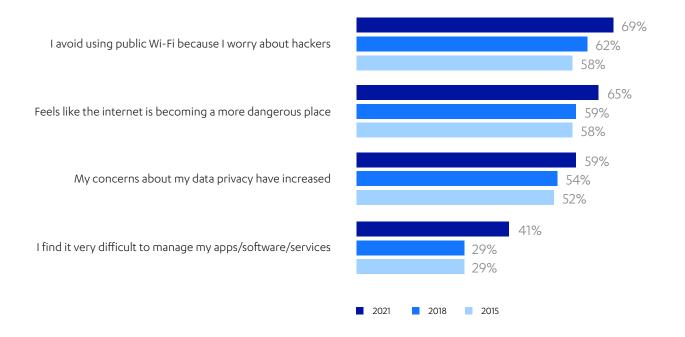
With cyber crime primarily motivated by money, **threats related to finances and financial accounts** are on an upward trend. These include stealing credit card information and cryptocurrency, bank account fraud, and theft of personal information that can be monetized in identity scams, account takeover, or by selling to others. The complexity of today's threat landscape and the creativity of cyber criminals make it difficult for the average consumer on their own to stay protected. And the fallout from cyber crime can have lasting consequences: Attackers can exploit critical personal information in crimes taking place months or even years later, which can cause long-term stress, anxiety, and financial harm to the victims.

WORRY PROMPTING CHANGES IN ONLINE BEHAVIOR

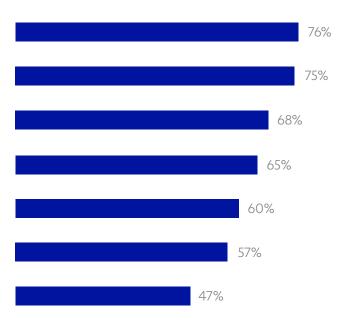
Digital transformation has impacted the way consumers perceive technology. 65% of survey respondents feel like the internet is becoming a more dangerous place, compared to 62% in 2018. And as their dependency on devices and connectivity has increased, almost two thirds of consumers find themselves increasingly worrying about online security and privacy, even if nothing is wrong. **The most tech-savvy segment is the most** **concerned** (80%) – they know about the threats and risks of the digital world.

Many consumers report that their concerns about online security have prompted them to make changes in their online behavior. 76% increasingly try to reduce the amount of personal information they give when filling in online registration forms or when making online purchases. 69% avoid connecting to public WiFi.

SECURITY AND PRIVACY CONCERNS INCREASING



NEW ONLINE SECURITY ATTITUDES MEASURED IN 2021



I increasingly try to reduce the amount of personal information given online

I would like my security provider to provide additional guidance

I would be willing to pay (a fair price) for a security service that provides active support to resolve problems

Increasingly I find myself worrying about my online or internet connected security

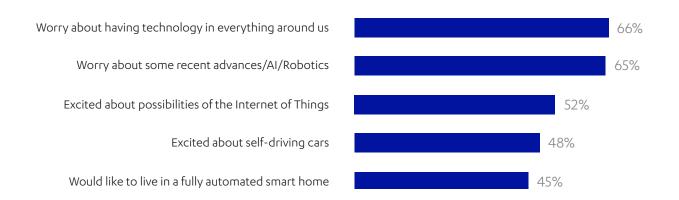
Managing security across all my connected devices feels like an almost impossible task

There are certain types of service that I would never use via the internet (doctor)

I have been working from home (more) / increased my awareness of security risks

Although people are excited about certain technologies, worry also emerges as a dominant emotion. Two thirds of respondents often worry about the degree to which technology is being integrated into everything around us. 65% worry about recent technological advances, such as the long-term implications of artificial intelligence or robotics.

WORRY DOMINATES THE RELATIONSHIP TO TECHNOLOGY



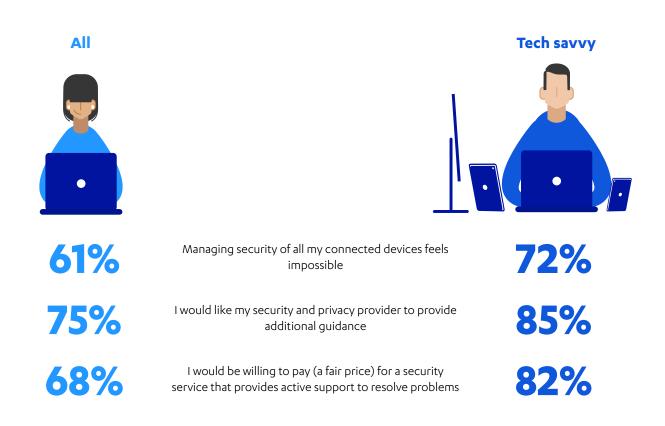
SECURITY FEELS COMPLICATED

When it comes to consumers' relationship with security, the **feeling of being overwhelmed is increasing**. 61% say that trying to manage security across all their connected devices feels like an almost impossible task.

Interestingly, even the most tech-savvy segment struggles with protecting all their devices. In this

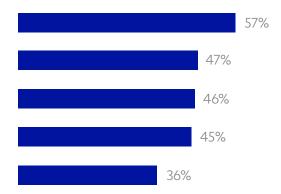
segment, 72% feel that managing security of their devices feels almost impossible. The tech-savvy segment is also the most interested in getting additional guidance from their security provider and the most willing to pay for a security service with active support.

SECURITY ATTITUDES OF ALL RESPONDENTS VS. TECH SAVVY CONSUMERS



Basic security solutions remain attractive among consumers. Survey respondents seem to understand the value of core security product benefits, such as browsing protection, protection from unauthorized access and banking protection. Increased worries and the struggle to protect all connected devices are highlighted in consumers' interest in **all-in-one security**: 36% find a single security solution that protects all devices attractive.

THE MOST APPEALING BENEFITS IN A SECURITY SOLUTION



A security product that protects your computer/tablet/smartphone from 'malware' that could be on sites that you browse

A security product that protects your computer/tablet/smartphone from unauthorized access coming from the Internet

A security product that shows you clearly, the status of your protection, and indicates what has been blocked, cleaned, disinfected etc. from your device(s)

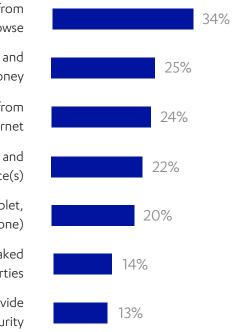
Online banking protection that protects your connection from malware or phishing while you pay online or transfer money

A single security solution/product that protects all devices (computer, tablet, smartphone)

to 45% of consumers. **Banking protection is the second most popular feature in a security solution that consumers are willing to pay for.**

As online banking and shopping have spiraled, **banking protection** that secures the network connection from malware and phishing has become an attractive feature

BENEFITS CONSUMERS ARE WILLING TO PAY FOR



A security product that protects your computer/tablet/smartphone from 'malware' that could be on sites you browse

Online banking protection that protects your connection from malware and phishing while you pay online or transfer money

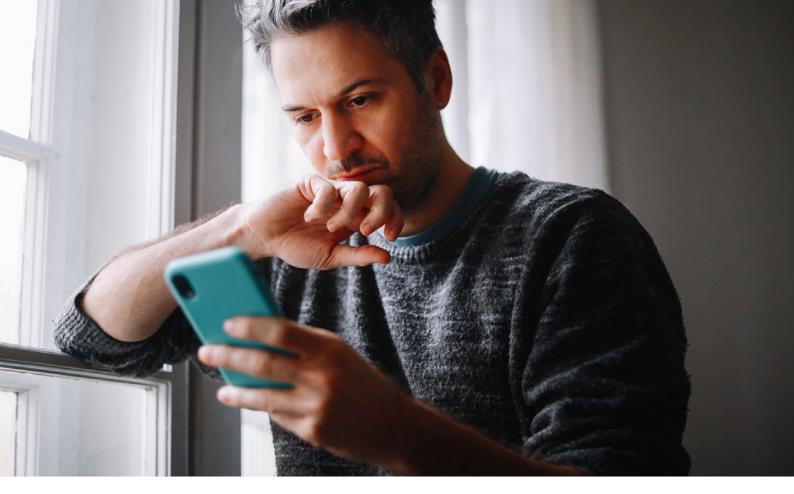
A security product that protects your computer/tablet/smartphone from unauthorized access coming from the internet

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A single security solution/product that protects all devices (computer, tablet, smartphone)

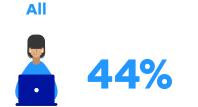
Alert system for when private and sensitive data has been hacked or leaked into the hands of unauthorized third parties

A security product that is constantly & automatically updated to provide uninterrupted security

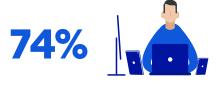


CONSUMERS WANT TO LEARN ABOUT ONLINE SECURITY

Growing concerns about the internet's dangers and data privacy have led to more people spending time researching security solutions and security threats in 2021 (44%) than in 2018 (39%). However, there is a vast gap between all consumers (44%) and the tech savvy segment (74%).



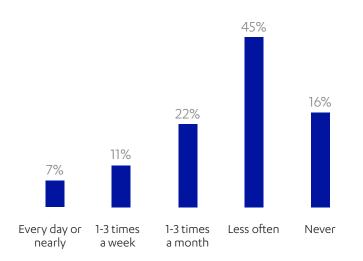
spend time researching online security solutions and security threats



Tech savvy

Regardless of their increased security awareness, consumers still practice risky behaviors online. This suggests that there is **a need for additional cyber security education.** When it comes to websites that include their credit card or bank details, 45% of consumers change their password less often than once a month and 16% have never changed their password.

CHANGING MY PASSWORD ON SITES THAT HAVE MY CREDIT CARD OR BANK DETAILS



Ransomware is one of the most concerning threats for consumers. 51% say they know what ransomware is; this awareness has risen from 47% in 2018. Ransomware attacks are often featured in the news, but it might not be clear for consumers how to protect themselves in practice. Therefore, it makes sense for security providers to include online security education in their services.

CONSUMERS ARE INTERESTED IN PURCHASING SECURITY FROM THEIR INSURANCE COMPANY

Regardless of free options available on the consumer security market, 60% of respondents pay for their main security and privacy solutions or use a combination of free and paid solutions. Willingness to pay for security is even higher within the tech savvy segment (70%).

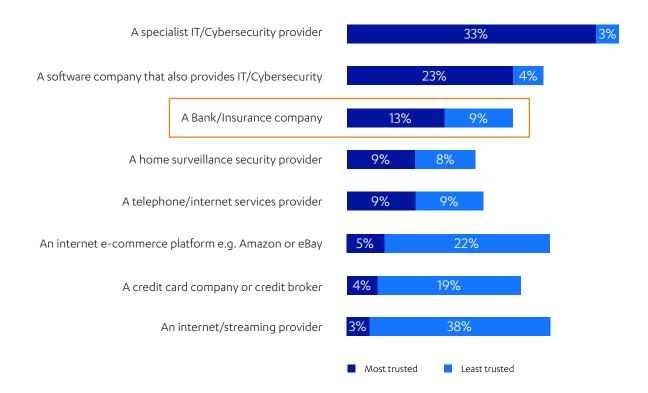
When asked why consumers pay for security and privacy software or applications, 27.6% cited **trust as the primary reason.** 13.7% said the paid version included an important feature that the free version lacked.

Not surprisingly, specialist IT companies and cyber security providers are the most trusted providers of

security, but **insurance companies and banks** are the next best alternative for purchasing security solutions. In comparison to streaming companies (3%), the credibility of insurance companies or banks as security providers is high (13%).

Consumers' willingness to purchase security from insurance companies creates a business opportunity for you. Digital security services are a natural extension of your insurance portfolio. Non-insurance services help you differentiate, acquire new customers, and increase the value of your offering.

SECURITY PROVIDERS CONSUMERS TRUST THE MOST



HOW INSURANCE COMPANIES CAN BENEFIT FROM OFFERING DIGITAL SECURITY

Digital security enhances your core insurance offering helping you to stand out from competitors and deliver what your customers are looking for. 45% of consumers feel the offering of non-insurance products is the most important factor when choosing an insurance company.*

Protecting your customers from online threats with a security app they use every day will make you top-of-

mind. Becoming an insurer who prevents damage from happening, and not only the contact for claims, will build trust and customer engagement. Reducing risks for your customers will also lower the overall cost of your claims.

Grow your sales, improve customer loyalty, and attract new customers with digital security. With us, offering security is easy and profitable for you.



* Source: Deloitte; A demanding future, The four trends that define insurance in 2020.



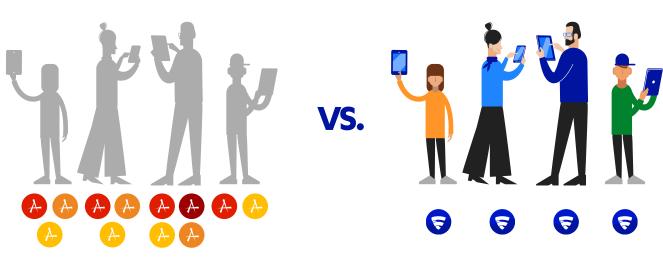
REDUCE COMPLEXITY FOR YOUR CUSTOMERS WITH ALL-IN-ONE SECURITY

Increased dependence on technology has impacted our attitudes about security and privacy. Worries about digital threats have grown, and security feels complicated. In a world filled with uncertainty, consumers want an easy-to-use solution to protect every aspect of their digital life.

Today's complex threat landscape requires protective layers beyond traditional antivirus. F-Secure TOTAL is

the most simple and comprehensive security, privacy, and identity protection solution on the market. Your customers will only need one app to protect their whole family.

F-Secure TOTAL includes protection against malware and viruses, safe browsing, banking protection, privacy protection, WiFi security, digital parenting, identity monitoring and a password manager.



ONE APP, LESS INSTALLATIONS

Typical situation today: 10-20 installations

F-Secure: 4 installations

COMPLETE SECURITY, PRIVACY AND IDENTITY PROTECTION FOR YOUR CUSTOMERS



BROWSING & BANKING PROTECTION

Let users explore the internet with worry-free online banking and shopping



MALWARE PROTECTION

Keep your customers' devices safe from viruses, trojans, spyware and ransomware with award-winning virus protection



STRONG PASSWORD MANAGEMENT

Allows your customers to create and synchronize passwords across all their devices

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PRIVACY PROTECTION

Stop trackers and ensure your customers' online privacy



MONITORING OF PERSONAL INFORMATION

Protect your customers' identities with industry-leading breach detection and underground web monitoring



PROTECTION ON THE GO

Protect phones, tablets, PCs and Macs everywhere, even on public Wi-Fi



PERSONAL INFORMATION BREACH ALERTS

Real-time alerts and guidance for your customers when their personal information has been a part of a breach or data leak

FAMILY RULES Lets parents set healthy online boundaries for their children at home and on the go

Offer our award-winning security, privacy and identity protection in a single application or select the protection features to match your desired value propositions. Choose to offer as-is, or customize with your own name

Reduce complexity for your customers – and yourself. Respond to real consumer concerns and attract new customers with a broad, compelling security offering. We have launched thousands of solutions with our partners around the globe and know just how to make it easy for you. Get in touch with us to learn more.

HOW TO MAKE DIGITAL SECURITY A PART OF YOUR INSURANCE OFFERING



and branding.

EDUCATION Share information about safe online habits



PROTECTION Offer tools for protecting online identity and devices



Provide reassurance and guidance

ASSITANCE AND RESTORATION



INSURANCE

Cover losses and damage with insurance

ABOUT F-SECURE

Nobody knows cyber security like F-Secure. For three decades,
F-Secure has driven innovations in cyber security, defending tens of thousands of office, homes, and millions of people.
F-Secure shields enterprises and consumers against everything from advanced cyber attacks and data breaches to widespread ransomware infections. F-Secure's AI-driven solutions also help to protect the connected devices and homes of your customers
The unique combination of technology and world-class Business
Services supporting the entire customer lifecycle is what makes F-Secure's products are sold globally by more than 200 service providers and thousands of resellers.

f-secure.com/insurance

