PLUG AND PLAY

Emerging Startups to
Realize the Vision of a
Digital P&C Insurer

**PLUG**AND**PLAY**
**INSURTECH**

# Part 1: The New Age of Insurance & Process Discovery

This is the first of a four part report that explores the effects of digitization and changing customer expectations, in part due to COVID-19, on the insurance operating model.

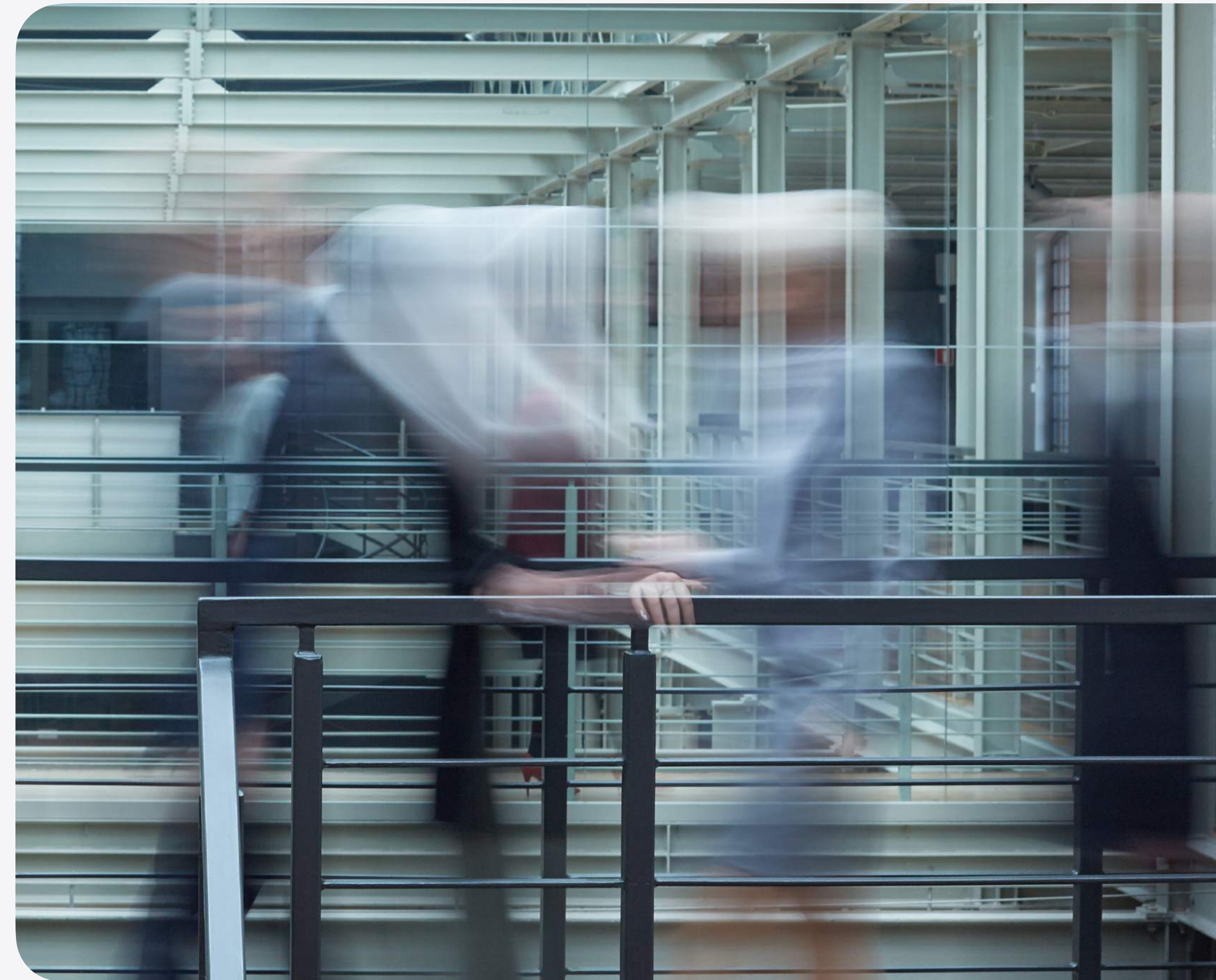With change comes opportunity.

# New Age of Insurance

**Innovations occur in times of greatest adversity and the current pandemic is no exception to the rule.**

The COVID-19 outbreak has forced companies, who have been sluggish in preparing for the Future of Work, to accelerate their digital transformation journey and experiment with new operating models as social distancing has radically changed the way we work and interact with customers. Besides major tech firms, Nationwide decided to make work from home permanent and shrink their 20 physical offices to four. Prior to social distancing, the insurance company was already working on their Future of Work program to explore transitioning more employees to working from home and COVID-19 accelerated the initiative.

## A Wake Up Call for The Industry

While the industry has been adopting digital technologies for many years, radical shifts in operating models will require change at every level of the organization, every part of the insurance value chain and the infrastructure that supports it. As such, businesses should break down these broad reforms into condensed initiatives, so they can observe where alterations in the value chain can have the most impact. The challenge, however, is that there has been a proliferation of different solutions and the purpose of this report is to highlight emerging startups from our portfolio/ecosystem that can help realize the vision of a digital insurer and build the next generation operating model in the industry.

# PROCESS DISCOVERY

Skan. | minit | C

# SALES & MARKETING

VYMO | Agentero | airkit | SPIRO | socialeads

# DISTRIBUTION

# MGA

# Digital Brokerage

# PaaS

Newfront | tomorrow | pei | INSTANDA | KASKO | Slice | voom

# UNDERWRITING:

## Property & Assets
zesty.ai | Betterview | CAPE | ARTURO

## Commercial
PLANCK

## Auto
Zendrive | Attestiv | nexar
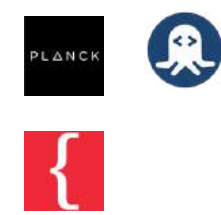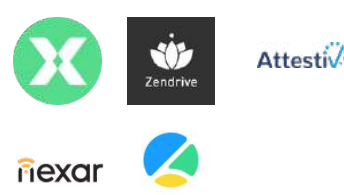
## Weather
TCS

## Cyber
CyberCube

## Pricing & Automation
OMNISCIENCE | AKUR8

## Intelligent Algorithms
ple | H₂O.ai

# DATA COLLECTORS

KEPLER | WINDWARD | CRUX | DS | SPACE KNOW | PlaceIQ
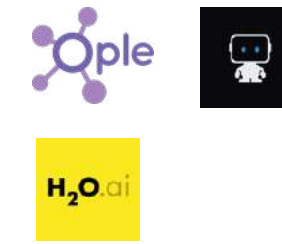
# CUSTOMER SERVICING/ ENGAGEMENT

INSURMI | pypestream | Forethought | airkit | marley

# POLICY ADMINISTRATION

BROKER BUDDHA | riskgenius
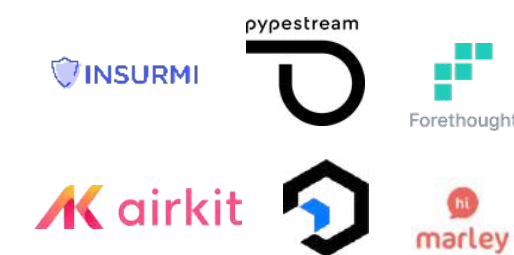
# CLAIMS & RISK MANAGEMENT

## Automation
FairClaims | MDGo | snapsheet | omni:us | CLAIM GENIUS

## Property
Co | flo

## Assets & People
STRONGARM TECHNOLOGIES | Parsyl | WORKLETE | C | K

## Cyber
zecOps

## Auto
sentiance | Zendrive | nexar | MONK

## Fraud Prevention
Attestiv | FairClaims | evolution IQ

# TALENT MANAGEMENT

WORKERA
a deeplearning.ai company

skyhive
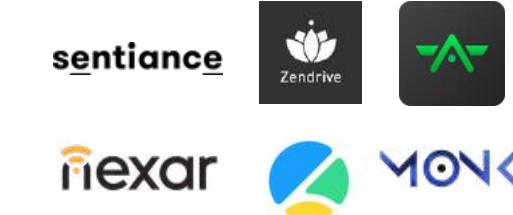
# DATA MANAGEMENT

## Integration
mparticle

## Biz Intelligence
macheye

## Data Privacy
inpher | fiddler | OKERA | mostly AI

# IT INFRASTRUCTURE

OpenLegacy
Digital to the Core

vFunction

CloudCheckr
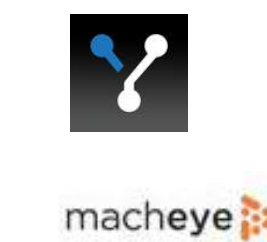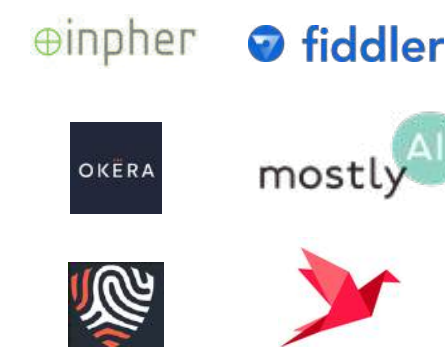
PLUG AND PLAY INSURTECH

Startup Market Map

# Process Discovery

To build the next generation operating model, you must start with understanding the current business process and ways of working.

# Startup Market Map

# Traditional Process Discovery is Broken...

## ...BUT THERE IS A BETTER WAY THROUGH PROCESS MINING

As insurers explore building the next-generation operating model, the industry needs to assess the current state of business processes. Traditional methods of process discovery - manual monitoring, interviews and recollection - can be time consuming, subjective, and often unsatisfactory. Asking employees to explain their processes often results in an over-simplistic we do A followed by B and C.

This often misses the reality that includes reworks, exceptions for special scenarios, and the fact that different people perform the same tasks differently. For successful transformations, insurers must also capture data around how employees really interact within a process.
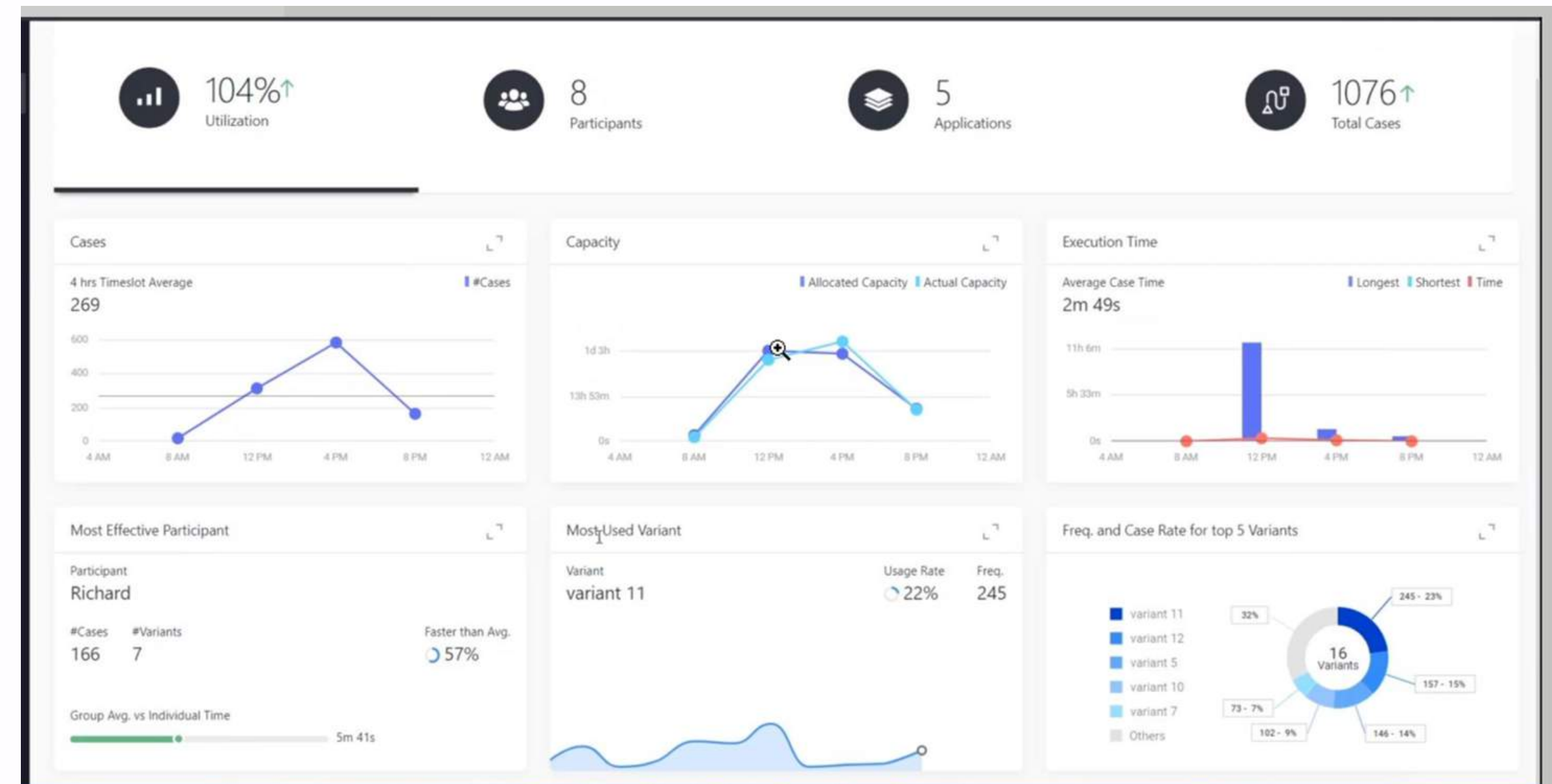
# Skan.

Skan uses computer vision to understand business processes nuances by watching the on-screen interaction of humans with digital applications. By observing human work on computer screens, Skan can draw a process metamodel comprising all inherent nuances and variations in processes. Such models become useful in simulation and modeling, efficient automation (RPA), effective transformation, precision training, process conformance, and etc.

**Funding:** $17.5m
**Select Investors:** Zetta Venture Partners, Bloomberg Beta, Cathay Innovation, Citi Ventures

# Startup Spotlight

# Skan.

## Background

Skan.AI is a cognitive proceed discovery engine that leverages computer vision and machine intelligence to help enterprises map, model, and manage business processes. Skan's innovative technology observes Adhoc work at scale and from the observed digital traces of human work synthesizes and creates a process metamodels, uncovering hidden process variants, and unveiling the invisible enterprise.

## Product & Services Overview

Skan's virtual process agents – a non-intrusive and lightweight probe on agent desktops or virtual machines - observes human work at scale capturing essential keystrokes and system interactions.  The observability of work at a vast scale and high precision is the hallmark of the Skan's technology.  Skan's cognitive engine synthesizes the resulting images and stitches them into a process footprint, showcasing how work works inside the enterprise, including all the process permutations and combinations. Skan's evidence-based, data-driven approach to understanding and rendering the process picture enables enterprises to model, simulate, measure, and monitor the processes and also automate and transform optimally.

Skan's technology is applicable to horizontal value streams in finance, accounting, HR, and core transaction processing across various sectors where employees work involves working across multiple digital systems.

## Management

**Avinash Misra**
CEO and Co-founder

**Manish Garg**
Co-founder and CPO

## Representative Clients

- One of the largest mortgage processors in the U.S.
- A multi-line, global industrial manufacturing firm
- A media and corporate data giant

# Avinash Misra

## Skan

---

### What is your background, and what inspired you to start a business in process mining?

I have been a technology entrepreneur for almost all of my professional career of 22 years. My area of specialization is in the use of Digital Technologies in the Enterprise. My last venture was an Enterprise Digital Transformation firm focussed on the Front Office & Customer Experience. This venture was acquired by a leading Digital BPM firm in 2015.

Organizations are waking up to the burning need for a data-driven map/model of their work "as is" to optimize *before* they transform and the ability to measure impact after they make interventions continuously.

My co-founder and I saw that most of the transformational success is predicated not on technology at play but rather on the understanding of the AS-IS. What is it that organizations do, and are they aware of what they do? That there is a big gap between what organizations think is their business processes and what is happening on the ground - this was a problem we saw across the board. We noticed that a large part of the enterprise business processes, especially their nuances, were invisible.

This led us to start a business around mapping, modeling, and management of the invisible work in the enterprise. We called it Skan as a play on Scanning the enterprise.

### Who is Skan's target customer, and what problem are you solving for them?

For example, a global insurance major was plagued by repeated failures in business process automation, optimization, capacity planning, and compliance. A potential cause was the lack of insight into actual business processes as they were executed on the ground by human agents. Skan was deployed to map/model and uncover hidden process variants and untangle the operational challenges. This led to a 300 percent increase in process conformance and a 2X increase in productivity based on the skill-based routing of work.

# Avinash Misra

Skan

Skan.

From Banks to Insurance companies to mortgage processors to Manufacturing companies, our customers love us because we provide unprecedented insight into digital work and drive continuous process conformance, optimization, uncover automation opportunities.

**What challenges have you had to overcome specifically related to your offering (privacy, employee willingness/ acceptance, and analytics)?**

The elephant in the room is the fact that we use computer vision to observe work on screens. People are worried about privacy and rightly so.

We have worked extremely hard to ensure that organizations have full control of their business data, and employees have full control of their private information. Our solution supports full and automatic redaction of sensitive information as well as inclusion/exclusion rules to handle employee personal work/ applications.

**What do you consider to be the main benefit of visual-based inspection vs. event-log?**

There are many benefits, and the main one is that digital "work" as we know it, is not what is captured in event logs. The data points in the event logs are only committed states of work, not work itself. Work, intact, is what humans choose to do between committed states of data. Visual inspection captures the very essence of work at its most granular level, which is why we call the output models describing work as Digital Process Twins.

That is, these are models of work that contain all information - both necessary and sufficient - about process execution at the most fundamental level - which application, what screen, what field was clicked by who, and when. All of this atomic data is aggregated upwards across the organization to create the highest fidelity description of the business process.
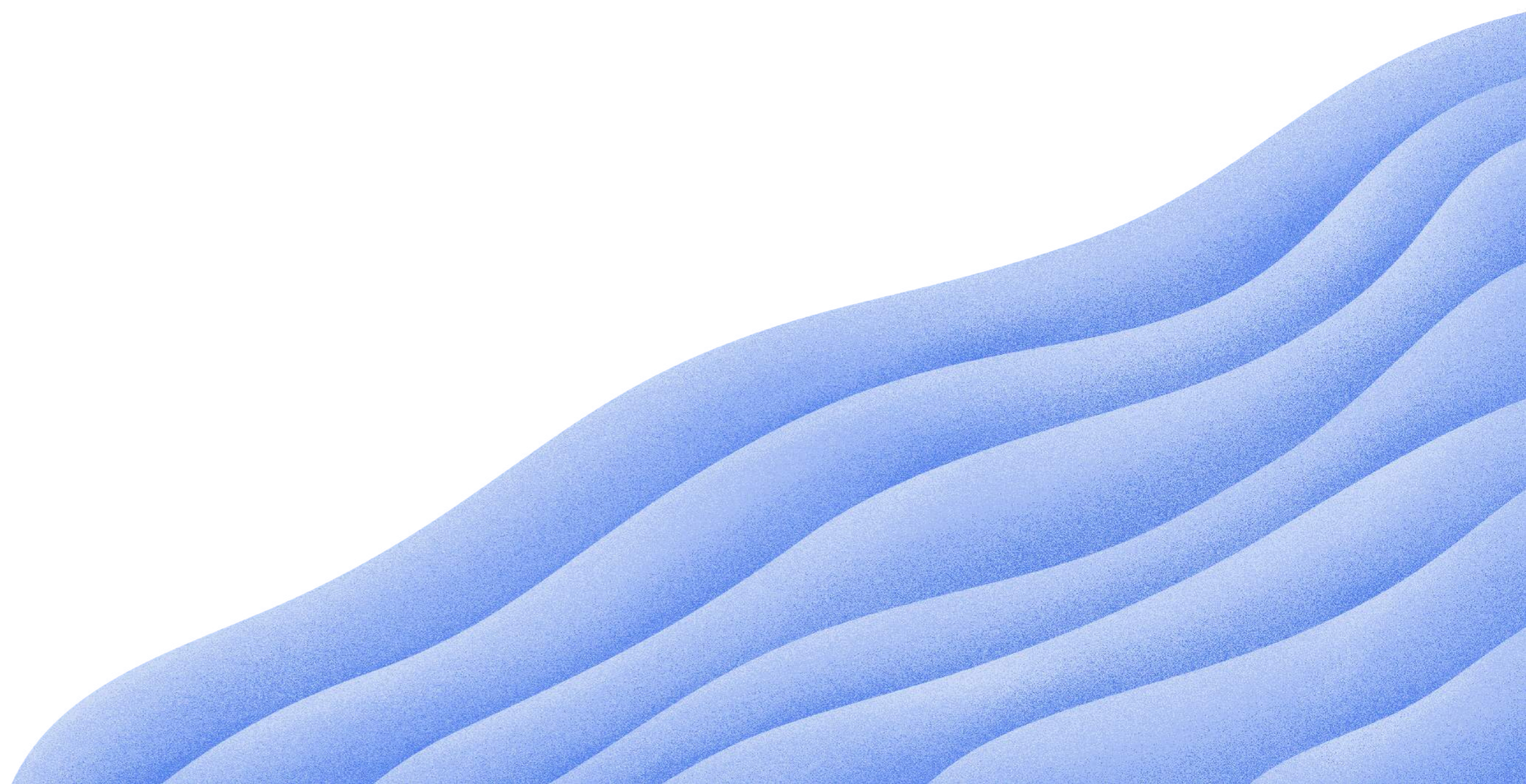
# Avinash Misra

Skan

## Skan.

**Can you elaborate further on the digital process twin? How can companies use such data to improve their operations?**

As I said, Digital Process Twins are models of work that contain all information - both necessary and sufficient - about process execution at its most fundamental level.

A process twin is interrogable - that is, it can be simulated based on data. For example, an anecdotal description of work created by a Business Analyst may say the following - "*In this AP or R2R process the ledger entry is updated in XLS - as opposed to the ERP - when the paying entity is California based.*"

Now, if the question is posed, "*how many times in the last 36 hours have the given 20 AP human agents used XLS when the paying entity was California?*" Quite clearly, an anecdotal description of work created by a human Business Analyst would not be able to answer this question because that description is not built grounds upon execution data. It has been built on interviews with people. Similarly, log-based approaches will miss the fact that an XLS was part of the process because they only look at ERP logs.

Companies use Digital Process Twins to Map, Model, and Manage business processes based on data rather than on gut, experience, and anecdotes. Digital Processes twins generated by Skan drive efficient automation (RPA), effective transformation, precision training, and process conformance, to name a few. Skan provides ongoing dynamic process monitoring without the need for painful and expensive integration with the enterprise backend tech stack.

**How does Skan work alongside with other RPA tools, such as Automation Hero or Uipath?**

Skan's output helps organizations to see all the hidden nuances of the business process and allows them to optimize *before* they automate. Skan is not just fundamental to robust automation, it is the very basis of creating an a map of where automation would be most useful. We also generate Process Disaggregation Diagrams, or PPDs in the RPA parlance, that RPA developers may confidently use to build robust automation on Automation Hero and UiPath.

Think of it this way, would you ever build a house without an architectural drawing or would your doctor perform surgery without an Xray or ultrasound?

# Avinash Misra

## Skan

**What's been the impact on Skan of the current COVID-19 global pandemic?**

A lot of our customers have had their workforces suddenly working from home. These are not 100 / 200 people working from home; instead, tens of thousands of people suddenly have gone remote. The burning question then that our customers are grappling with is:

*"What happens to process compliance, what happens to quality when there is no supervisory, and there is no supervisor? "*

Because of the way Skan works, customers are seeking an increased relevance of Skan in Mapping, Modeling, and Management of remote work processes at scale.
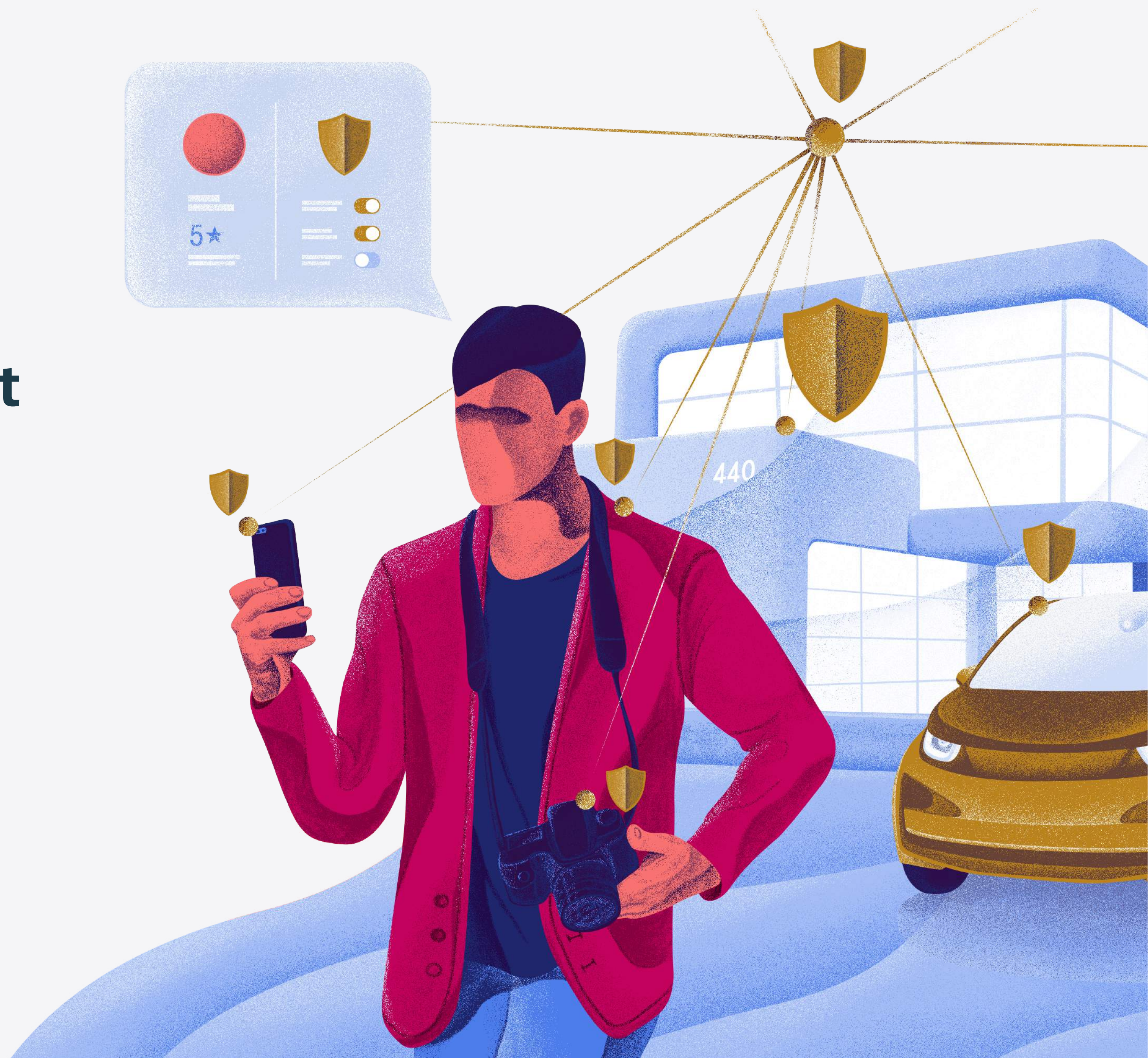
## Next Up

# Part 2: Putting Your Best Foot Forward

In the next edition, we'll cover the threats and challenges to how insurance is marketed and sold as well as highlight the new models startups are using to ensure better coverage.

Learn more

For more information, please contact

**Zoey Yi Wu**
([zoey@pnptc.com](mailto:zoey@pnptc.com))

PLUG AND PLAY