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Expert Insights:

How insurers can become data-driven organisations

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Introduction

Data is now fundamental to how insurers operate efficiently, compete effectively and navigate the future. If your teams are making decisions, creating products or servicing customers based on partial, aged or even incorrect data, you're at a disadvantage, especially when competing with disruptive, emerging insurtechs.

What's more, if you're taking action based on assumptions rather than actual data, the risk may be more existential.

Data is transforming the way insurers serve customers, upsell and cross-sell products, and respond to regulatory or market demands for open data. Tomorrow's winning organisations are those who manage to access, leverage, and master huge volumes of high-velocity data in real time while driving cultural change to react nimbly to market needs.

If you don't act, your competitors probably will.

The future of insurance

While insurance and banking are often compared as siblings in the financial industry, they differ in one aspect: insurance is lacking behind banking when it comes to digital transformation and designing customer-friendly experiences.

If you use digital banking services, you are interacting with your bank almost daily through notifications, spending advice, investment recommendations and so much more. A bank is no longer a transactional place you go, it is a digital companion in your pocket that plays a crucial component in your life. Banks are transforming to exceed and anticipate customer demands. And one key driver behind that is their increasingly intelligent way of using data.

Most insurers, on the other hand, still hold a lacking, reactive approach towards data. The status quo is changing with the rapid entrance of insurtechs and modern insurers who are built on digital-first foundations coupled with discerning customers who demand seamless experiences.

On the global scene, rising players like Lemonade receive praise for their customer-first approach that allows customers to buy selected insurances online and pay through a monthly subscription — all powered by a unique combination of artificial intelligence and behavioural economics. No more long wait times or impossible-to-understand policies. Blink by Chubb is another newly launched global case where user-centricity is in the front seat.

In Singapore, players like FWD, bolttech, and AIA are among the most visible when it comes to a customer-first approach. AIA, for instance, was the first insurer to use Sign with Singpass to verify user identity and substitute wet signature with digital signatures. This is just one of AIA's initiatives to use technology, data, and analytics in becoming a nimbler and more connected organisation.

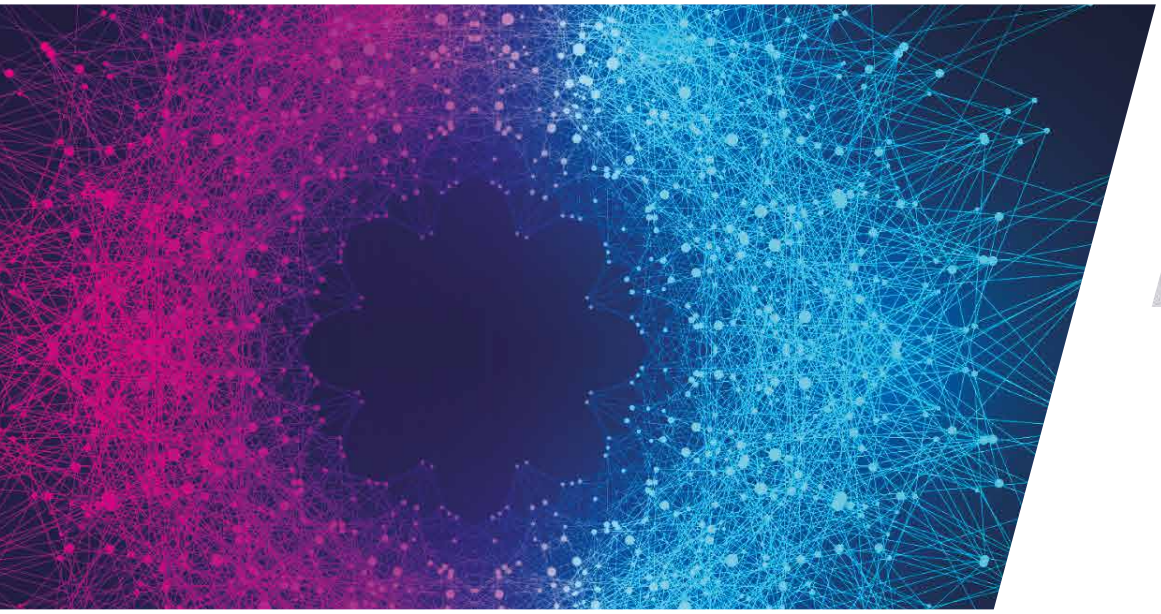
A significant number of traditional insurers have already started to transform, but many are early on their road towards becoming data-driven organisations. In addition, rapid technology advancements like the rollout of 5G will further fuel the transformation agenda by enabling devices to transfer data much faster in a safer way.

Just talking about data and looking at it doesn't magically create great experiences. Whether you're upgrading your legacy system, moving to cloud, monitoring assets with IoT devices or calculating risks in real-time, it's crucial that your overarching data strategy and organisational skillset support your business goals.

Are you ready for the next-generation users in the future of insurance?

Making data action-oriented

If you truly want to capitalise on automation, machine learning and artificial intelligence, data needs to flow in real-time, creating feedback loops that form the basis of machine-driven operations. Making decisions or attempting to automate business processes based on partial or untimely data simply doesn't work if you want to be truly data driven and customer centric.



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Dealing with the unknown

The problem with legacy data is that it's usually collected, structured and stored in databases designed for a limited purpose or use case. This approach embeds a 1:1 relationship into the data. It makes it challenging to use it for other purposes, especially ones that are evolving or emerging.

Enterprise data tends to reflect the organisational structure that created it. It is often silo-ed, internally focused and isn't customer-centric. It has usually been structured to report on what happened weeks or even months ago and doesn't help you influence what's happening right now. Emerging businesses don't have these legacy challenges.

The symptoms of a lack of data flow can include:

- large numbers of staff manually reconciling transactions,
- bottlenecks or blockers always prevent deploying or scaling automation,
- multiple departments working on the same customer value chain but being reluctant (or unable) to share data about it with other teams, or
- making decisions based on old, partial or inaccurate data, often as spreadsheets.

How data can be your differentiator

Being a data-driven organisation is key to thriving when the primary differentiator between competitors is the data they have and the decisions and actions they take as a result.

On an operational level, data needs to flow. It must be real-time (or near real-time) and available for analysis, cross-referencing, modelling and action. Data can no longer be something that is stored, static and structured as reports. It must support many- to-many relationships, be available for interrogation, analysis and cross- referencing with data from other teams, function and sources.

Data can and should form the foundation for providing personalised experiences for your customers. It should help you engage and interact with customers in their entire lifecycle as a single entity.

One critical pitch question we hear at investment rounds is always: "how are you going to use your data?" For insurers, the question to ask is how much you can use data in its original form or move towards leveraging it to devise great customer experiences. An example is using IoT to provide lifestyle hacks and discounted premiums or even to offer usage-based products.

How are you going to use your data?

Breaking down traditional silos

Today, many traditional organisations are a collection of related but disparate functions. Whether it's because of internal competition, risk management or legacy technology, they often work ineffectively with or even against each other. They're focused on optimising their process at the expense of overall business and customer value.

Some organisations have built or are starting to build data management platforms. They deliver limited value, becoming a 'sink' for all data and only delivering reports and charts (business intelligence analytics). They don't power timely decision-making. What's more, they are usually the catalyst of internal debates about data quality.

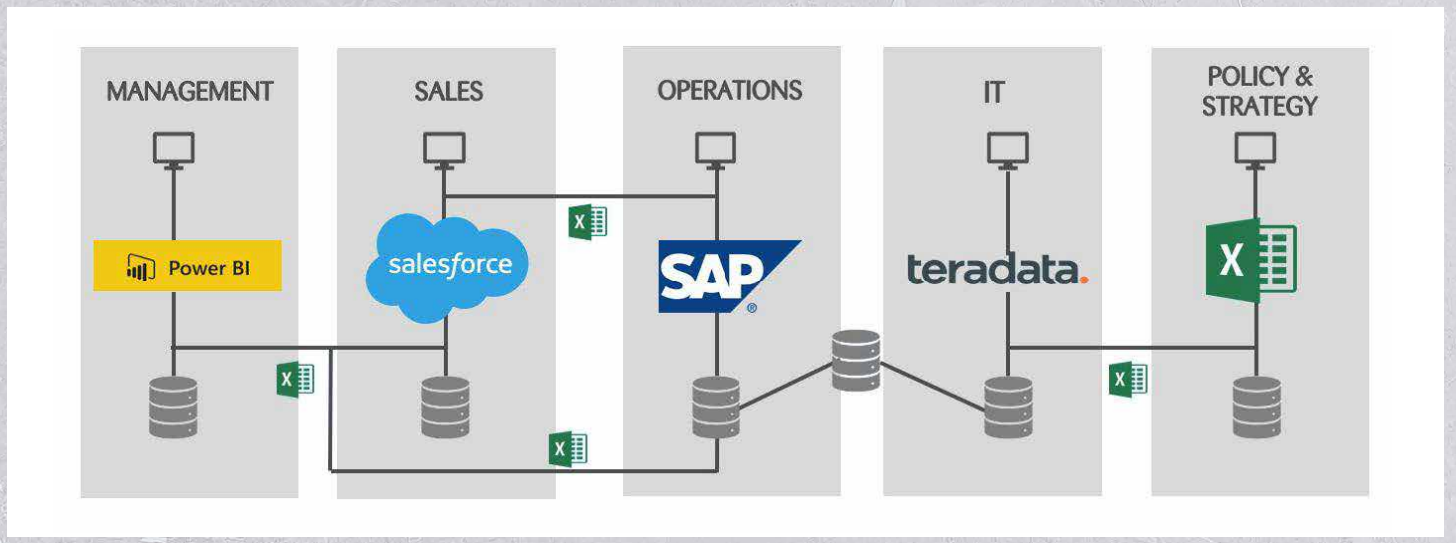


Fig 1: In most organisations, data is static and difficult to extract from applications that were never designed to share data across the enterprise. Data management platforms often make the problem worse.

Signs that you're a data-driven organisation

In a data-driven organisation, information is accessible to all and open by default. The organisation can operate as a single system in real-time. There is a constant, high-velocity flow of real-time data from internal processes, IoT and other devices. Data is available in its raw, unstructured format, rather than structured or processed, rendering it partial or incomplete when other teams use it. The geospatial aspects of data can then be elaborated to unlock new value.

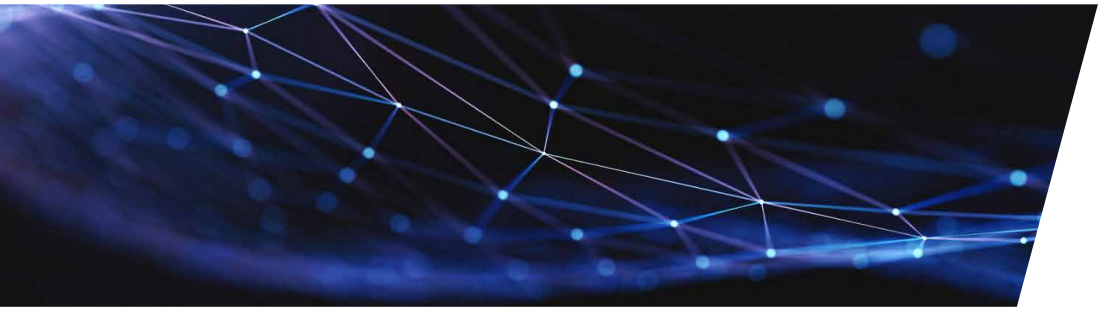
Individuals, teams and departments will have the tools, skills and understanding to deal with data. Teams are aligned around creating value for the whole organisation, whether through incentivisation or how business cases are evaluated and approved.

A data-driven organisation can see immediate value when investing in a particular team or department that also delivers benefits elsewhere in the business. This transparency reflects within teams, informing their thinking and changing the way they approach daily operations.

When data flows, assets' status and performance can be monitored in real-time, leading to risk management based on data rather than assumptions or probability like in underwriting or claims processes.

Likewise, customer communication becomes responsive and even pre-emptive. Underpinning this change are the feedback loops and multi-directional flows of information that form the basis of automation, AI and machine learning. Without such feedback loops and data flows, automation initiatives risk scaling-up inefficiency and error.

A data-driven organisation can be monitored, modelled and optimised as a whole system. It powers product development and innovation at a significantly reduced time-to-action and time-to-value.



The journey to becoming data-driven

So how do you set about becoming a data- driven organisation? The answer is certainly not to define a target operating model (TOM) and create a multi-year strategic plan to deliver it. The reality is that the world today moves faster than your strategy, calling for greater agility across all functions.

Data warehouse programmes remain the standard response to the need for better engagement with data. They tend to mandate that teams and departments supply their data to a central database in a specified format.

This approach, however, rarely leads to faster customer onboarding, policy issuing, let alone duplicate claims and fraud detection. Data warehouse building is effectively a strategic exercise that collates the data you already have with a process that typically takes 2-3 years to complete.

Our approach is radically different. We suggest that insurers create new capabilities that focus on customer value so you can quickly start to see the output. The goal is to understand, analyse, take action, and evaluate impact with speed.

It's important to remember that above all, you need to be laser-focused on delivering value. The TOM approach puts the focus solely on technology and attempts to build a data utopia. The reality is that you will need to move more quickly, focus on the business drivers, and create a culture that can adapt and change again.

A data-driven organisation doesn't have all the answers or a proven blueprint for success, but it is equipped with the vision, tools, information and data literacy to find them.

Five principles for deriving value from data

1. Data should flow, being available where and when needed, rather than being stored and static.

2. Timeliness is crucial. Having data available in real-time means that it can inform decisions and actions rather than just report on them after the fact.

3. Data should be available in its raw, unstructured form to prevent it from becoming partial or misleading. Your organisation needs to learn to work with all kinds of data in all sorts of formats, not waiting for 'perfect' data. This also provides traceability of manual corrections and derived data over time.

4. Your ability to use data should be multidimensional and geospatial, supporting many-to-many relationships and myriad data producers and consumers, rather than being structured only for specific, pre-defined purposes.

5. Leaders must nurture cultural change when it comes to data and investing in data initiatives. Individuals, teams and departments need to build their business cases based on cutting across internal silos, focusing on overall business value rather than optimising each department in isolation.

Leaders must nurture cultural change when it comes to data and investing in data initiatives.

What are data pipelines, and how do they help?

You have data pipelines when data is available to any (authorised) individual, team or department within your organisation that wants or needs to use it.

In data-driven organisations, information is no longer held in silos, reflecting a rigid and adversarial departmental structure. Instead, we use data to power whole system change, 'working backwards' from the customer. Data from one function can be accessed, interrogated and combined with data from other processes or even external sources.

Data pipelines are streams of continuous data, like the water in a tap, comprised of real-time data created by data producers and used by data consumers. They drive the feedback loops that help to operationalise automation, machine learning and AI initiatives. Such innovations will make your organisation more effective, competitive and smart but only with the right data flow. Partial, aged or inaccurate data will only serve to scale up inefficiency.

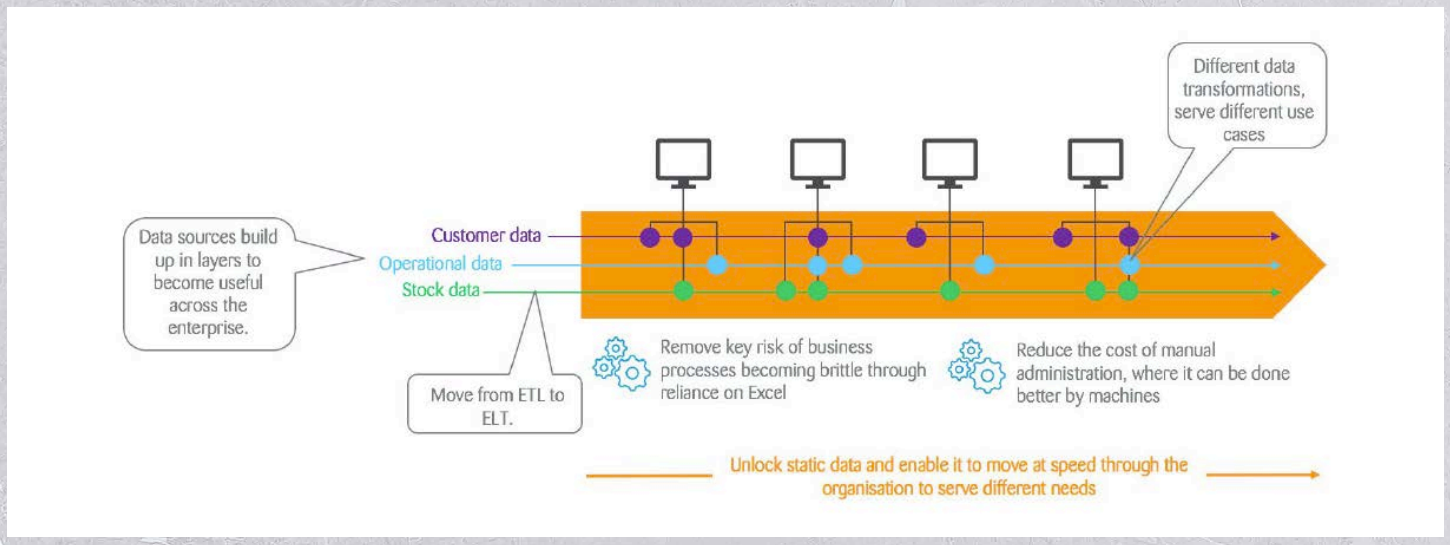


Fig 2: Data pipelines make enterprise data useful across the whole organisation to underpin better customer-facing digital services and aid faster, superior decision making within internal business processes.

Delivering data-driven organisations

Consequently, the key to making your organisation data-driven is to focus on action and progress. Think about building capabilities and encourage a culture in teams to think in the same way as technology companies or insurtechs to move away from legacy technology and systems. Prioritise the delivery of value in specific scenarios that cut across business functions and relate to customer value. Identifying these 'thin slices' allows you to focus on realising the value and showing results in months rather than years.

Once you have data pipelines established, you can ingest large volumes of raw, real-time data from the systems, devices, ecosystem partners, and even customers that offer the most potential upside.

This allows you to start processing, matching and linking the data to create value and feedback loops to drive action.

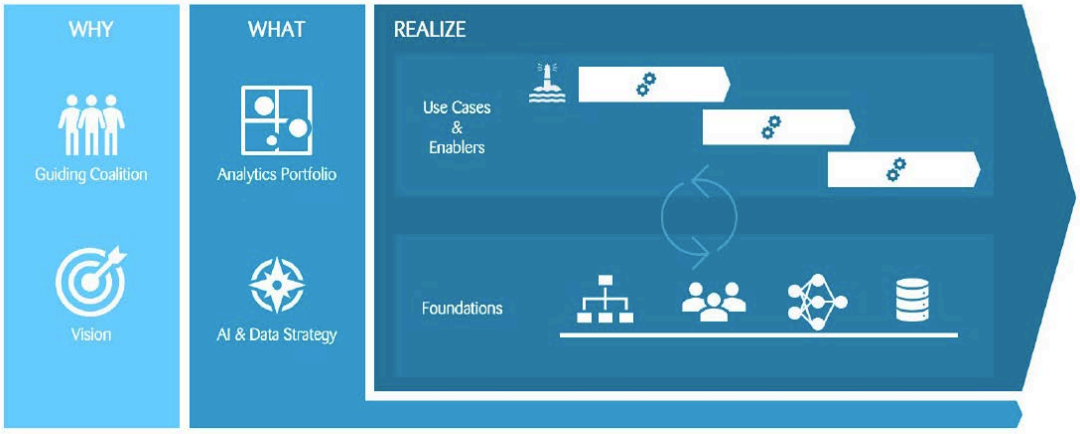


Fig 3: Evolve a data-driven business one 'thin slice' at one time, where each slice serves specific customer needs and delivers return on investment in its own right.

Leadership's role in data-driven organisations

1. Create a culture of open data and sharing between departments, with transparent and agreed meta-data, permitting teams to look at the broader value outside traditional silos.

2. Open up data flow between departments using real-time APIs and geolocation.

3. Update the legacy estate to enable flow to happen at scale and build the business case to deploy data-driven change even further.

About Zuhlke

Swiss roots, global reach. Zuhlke is a global innovation service provider with over 50 years of leading expertise in quality software and data engineering, digital strategy and business innovation. Founded in Switzerland in 1968, Zuhlke operates in 16 locations worldwide, supported by a talent pool of over 1,300 technologists and innovation experts.

Groupwide, we support business on over 10,000 successful projects, working with clients from large Forbes 100 companies to innovative start-ups across diverse industries and verticals: from banking and insurance, to medical technology, pharmaceutical, and industrial engineering.

Our teams are focused on delivering quality value through technology, putting client success at the forefront of what we do. Successful data transformation is founded on the ability to move quickly, delivering value early, and having a culture that challenges the status quo to always emerge from your most disruptive competitors to best serve your customers.

If you would like to learn more about becoming a data-driven organisation, let's talk.

Data pipeline

Data platform

Data-driven mobile apps

Data-driven companies

Further information

To learn more about how data can help your organisation, reach out to Zuhlke.

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