











# TOMORROW: 2050

**Alternative Futures for Healthcare** 

## **PURPOSE**

The purpose of this publication is to explore alternative futures of the healthcare sector toward 2050, with particular emphasis on M&A potential at a global level.

Scenario planning exercises are well-known and recognised tools for gaining foresight about plausible futures and identifying key drivers for business growth and the potential influence of future events. To this end, four scenarios are presented. The development of these scenarios was based on a process that first identified the key drivers, from which pivotal uncertainties were distilled. These were then used to craft the scenarios.

Importantly, an inclusive co-creation approach was used from the outset.

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# FUTURES THINKING PRINCIPLES

# THE GROUND RULES



Seek knowledge about those factors shaping the future

We do not make predictions



# **Craft alternative futures**

Understand there is more than one possible future



Explore the issue from multiple perspectives

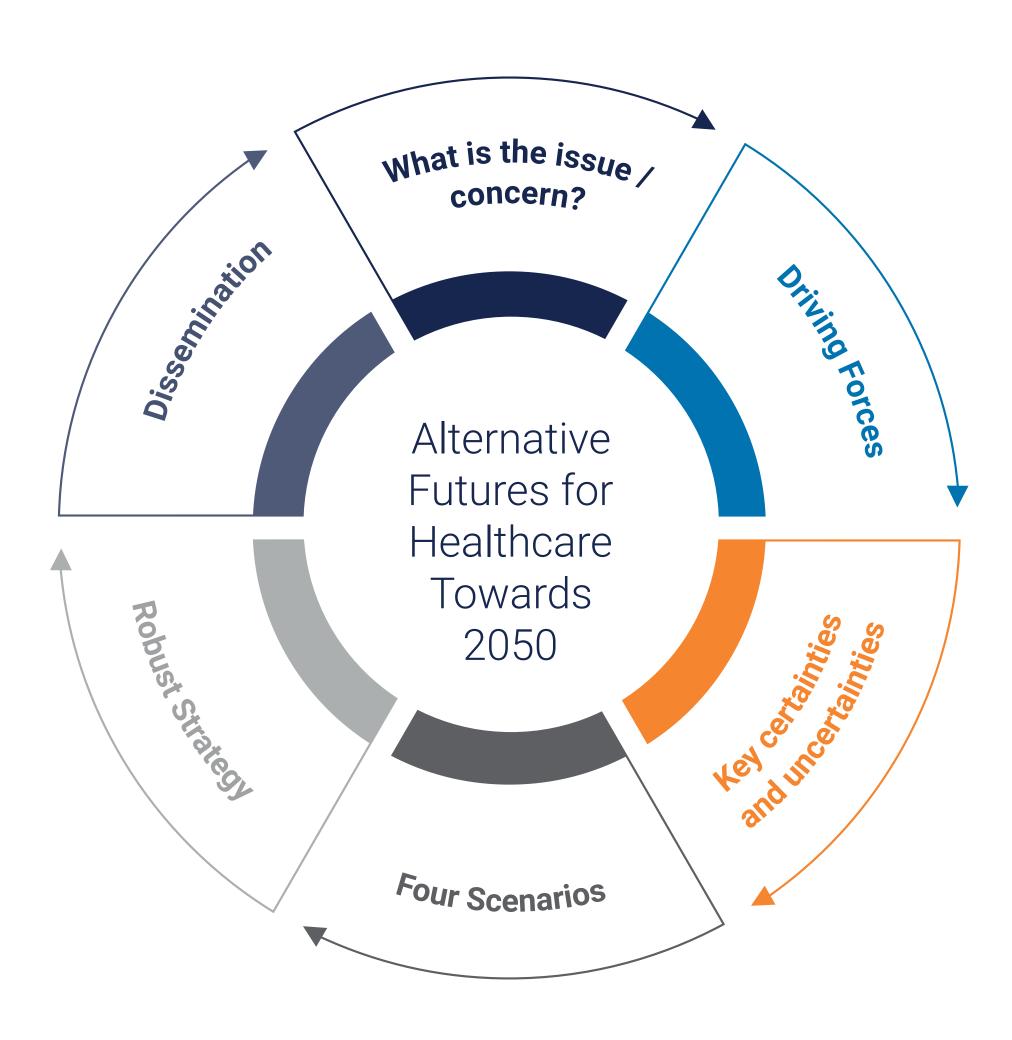
See change as holistic and systemic

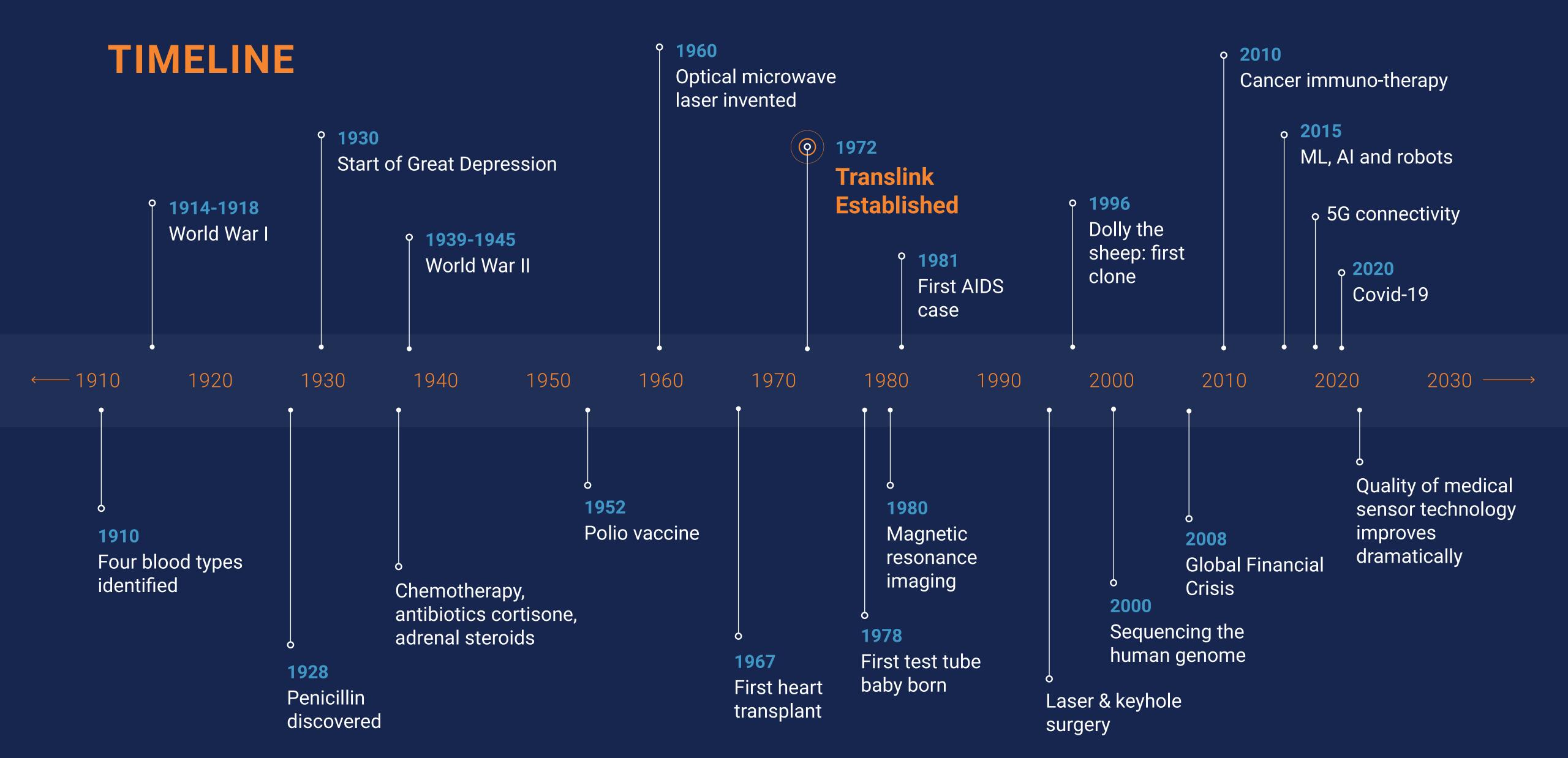


# Scenarios offer learning journeys

They enable us to rehearse for the future

# THE SCENARIO PROCESS





# **DRIVING FORCES**

Forces that influence the futures of healthcare toward 2050

These driving forces were sourced from a comprehensive environmental scan and from think sessions with key stakeholders. This process ensured that the driving forces identified for the industry were as comprehensive as possible.



01 The Process 02 The Scenarios 03 Conclusion 04 About & Contact

Conflict	<ul> <li>Wars</li> <li>Cold wars</li> <li>Weaponised interdependence</li> <li>Political instability</li> </ul>
Alliances	<ul> <li>Formation of economic blocs</li> <li>Near-sourcing of manufacturing capacity</li> <li>Tension between trade promotion and infant industry protection</li> </ul>
Policies	<ul> <li>Policy catch-up</li> <li>Policies to promote industrialisation</li> <li>Policy arbitrage</li> <li>Localisation policies</li> <li>Economic participation policies</li> </ul>
Macro- economic	<ul> <li>Trade, financial and tax policies</li> <li>Developing countries' upliftment priorities</li> </ul>
Micro- economic	<ul> <li>Changes in supply chain dynamics</li> <li>Continued success of incumbents</li> <li>Shrinking boundaries between levels of the supply chain</li> <li>Shrinking boundaries between industries</li> </ul>
Meso- economic	<ul><li>Formation of therapeutic clusters</li><li>Global partnerships</li></ul>
Business level	<ul> <li>Urgency to become 4IR ready</li> <li>New business models,</li> <li>Scarce skills and talent</li> <li>E-commerce and telehealth</li> <li>Artificial Intelligence</li> </ul>

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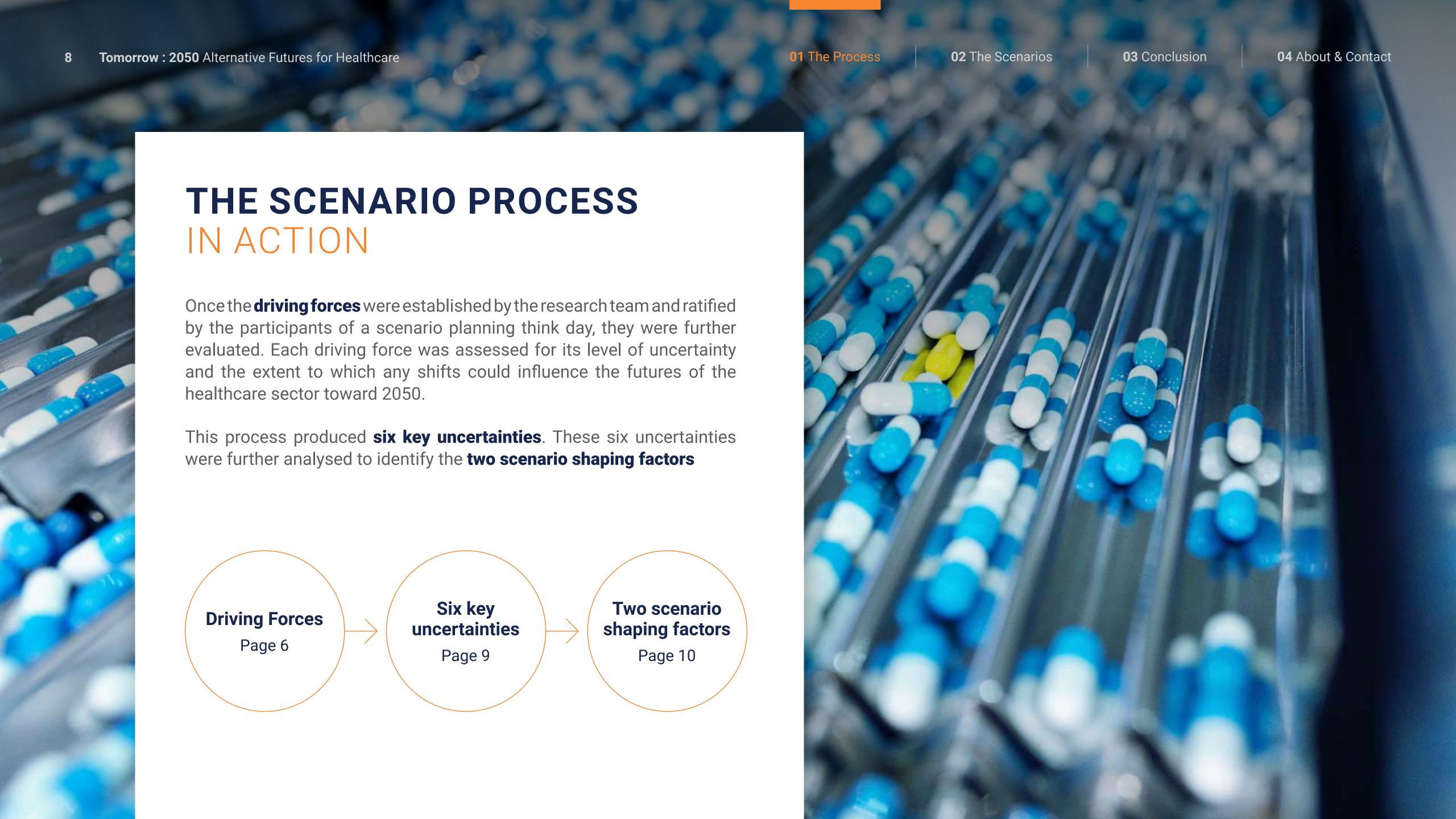
Social macro drivers	<ul> <li>Increasing life expectancy</li> <li>Decreasing fertility rates</li> <li>Changing burden of disease</li> <li>Move from illness to wellness</li> </ul>
	<ul> <li>Rise of the alternative health sector</li> <li>Job and income polarisation</li> <li>Rethinking of capitalism</li> <li>Pursuit of the sustainable development goals</li> </ul>
Social specific drivers	<ul> <li>Impact of artificial intelligence on jobs</li> <li>Interventions to overcome spatial legacies</li> <li>The effects of the [Covid-19] pandemics</li> </ul>
Technology integration	<ul> <li>Digitisation of the production process</li> <li>Interconnected production lines</li> <li>Personalised medicine</li> <li>Customer manufacturing</li> </ul>
Inconsistent technology implementation	<ul> <li>Installed infrastructure not suitable for the digital industry</li> <li>Not suitably qualified employees</li> <li>Lack of creativity</li> <li>Data security and legal issues</li> </ul>
Future technologies	<ul> <li>Internet of [Medical] things</li> <li>Artificial Intelligence</li> <li>Telehealth and remote care</li> <li>Organ care and bioprinting</li> </ul>
Competition/ antitrust	<ul> <li>Public interest factors considered in merger control</li> <li>Special scrutiny of acquisitions of strategic assets</li> </ul>

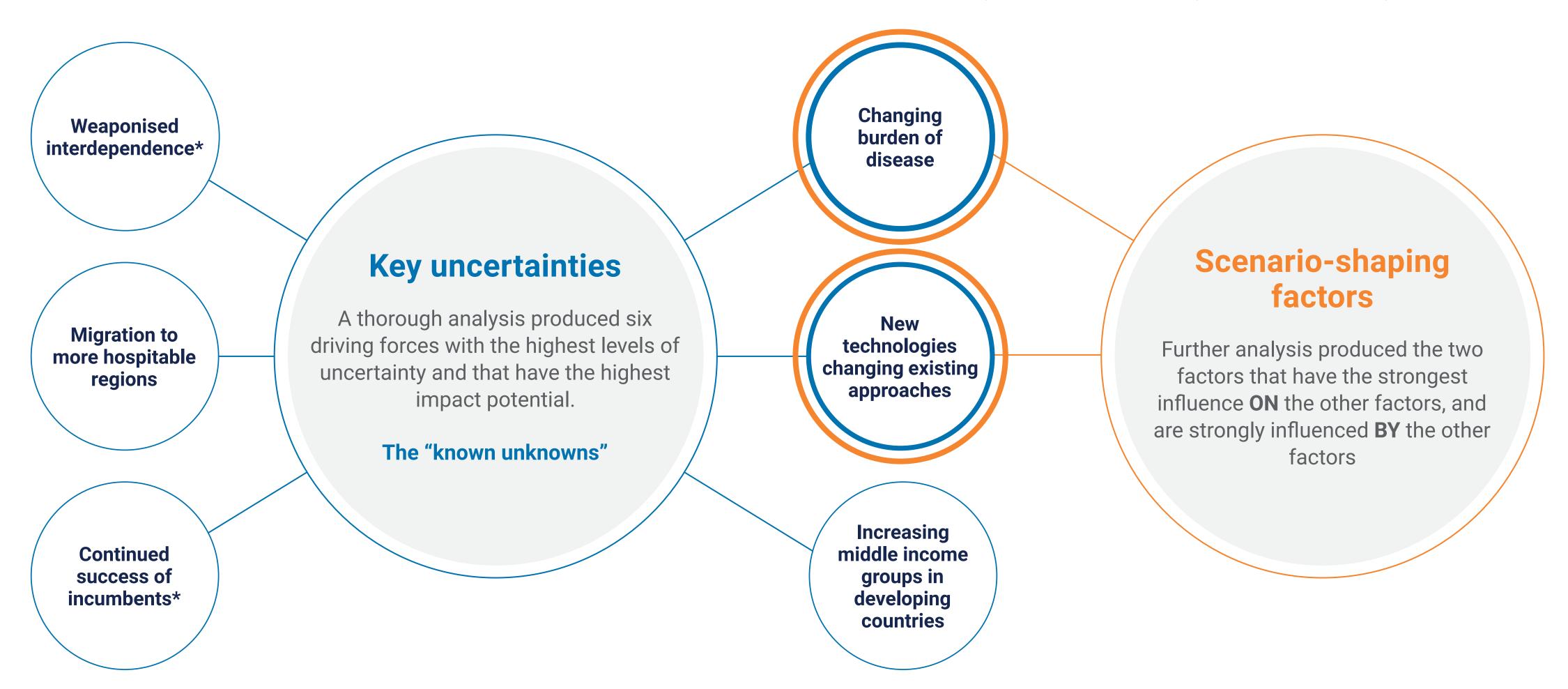
Other laws,
regulations
policies,
reporting
obligations

- Impact of technology law and environmental law
- Governments amending laws to acquire interests in certain companies
- Impact of companies law, consumer protection law, data protection law, intellectual property law

# **Environmental** drivers

- Migration of the population to more hospitable regions
- Increase in incidence of health problems due to exposure to extreme weather conditions
- Resource scarcity (including food and water)
- Reduction of food quality
- Forced migration resulting in water and sanitation shortcomings
- Activism





### \*Definitions

**Weaponised interdependence** refers to the exploitation of control over critical nodes in the global economy to exert geopolitical leverage over competitors. Governments and economic blocs seek domination over the critical connections of the world's supply chains, to ensure strategic leverage.

Continued success of incumbents refers to the level of continued success that existing players in the market could enjoy.

Development and

adopti

<u>on</u>

<u>of</u>

new technologies

# THE 2050 SCENARIOS

### **Luxury cruising**

The healthcare sector can develop and refine the best technologies to address a slow and gradual shift in the burden of disease – much like a luxury yacht on calm seas

Slow and gradual shift (fairly easy to anticipate)

- Changing burden of disease -

### Wind-surfing

Much like a windsurfer uses simple technology to navigate mostly calm waters that are well-known, the healthcare sector applies existing technologies to attend to a slow and gradual shift in the burden of disease

### White-water rafting

The healthcare sector applies nimble and agile technologies to navigate the radical waters of fast and unexpected changes in the burden of disease

Rapid and radical; surprising

### Sinking ship

Indicates that the healthcare sector, with its inefficient technologies, is fighting a losing battle against the rapidly changing burden of disease

Slow; Reactive; Inefficient

**Tomorrow : 2050** Alternative Futures for Healthcare







# A DEEP DIVE into each scenario

# **LUXURY CRUISING**

In this future, there's a slow shifting of the burden of disease, which allows for proactive and efficient development - and adoption - of technologies. This creates global synergies and opportunities for 'deep' research and development. M&A activity is primarily driven by incumbents as they buy up emerging technology companies at pace.

Exploring the critical factors catalysing this scenario  $\rightarrow$ 

### - Luxury cruising

White-water rafting
Sinking ship
Wind-surfing

### Changing burden of disease

Disease patterns (physical and mental) replicate those experienced in the developed world over the last 100 years; therefore, healthcare providers are able to anticipate the evolution thereof with relative certainty.

# Development and adoption of new technologies changes existing approaches

In this future, we experience an upsurge in customised diagnoses and treatments, predictive diagnoses, and the rapid development and testing of new and innovative treatments. The development and adoption of new technologies is proactive, efficient and adaptive and it creates synergies.

The focus of technological innovation is on enhancing the quality of long-life.

### Migration to more hospitable regions

Migration patterns are similar to the last 20 years; the major driver of migration is perceived economic opportunity, rather than healthcare reasons.

### **Continued success of incumbents**

Incumbents build on their existing expertise and capabilities. Natural monopolies develop. High barriers to entry persist. Incumbents invest highly in research and development (R&D).

### Weaponised interdependence (governments amend regulations to acquire interests in companies or influence their activities)

Governments see an opportunity to enhance the quality of life of their people, because the burden of disease shifts slowly, and technologies advance rapidly. Therefore, in some cases, they would consider taking steps to influence the activities of organisations in the healthcare sector to secure the best possible options.

# Increasing middle income groups in developing countries

Global markets shift to the South, especially Asia. There is a growing demand for and access to advanced (beyond primary) healthcare products and services. There is a greater awareness of the importance of personal healthcare.

THE SCENARIOS

### - Luxury cruising

White-water rafting
Sinking ship
Wind-surfing



### What this means for M&A

M&A is driven by incumbents; they buy up emerging tech companies to:

- Acquire their expertise;
- Retain the natural monopolies, and
- Prevent new entry into the market.

The slow-shifting burden of disease creates opportunities for 'deep' R&D and for creating synergies and efficiencies in providing healthcare products and services to both existing and emerging markets.

There's a M&A focus from incumbents on organisations that could enhance their ability to offer self-diagnosis and self-treatment through innovative technologies.

Incumbents also use M&A to acquire a footprint in new markets (where numbers of middle income consumers are growing rapidly).

Horizontal mergers happen, both in-country and at a regional (economic bloc) level. Vertical mergers and acquisitions are used to control the supply chain. M&A activities are often endorsed by governments, that want to ensure the best available healthcare for their people.



# WHITE-WATER RAFTING

In this future, we see a rapidly-changing - often surprising - burden of disease, which prompts the proactive, efficient development and adoption of technologies. A globalised world experiences globalised disease patterns, with migration driven by people seeking to escape new-disease hotspots or move to places with good healthcare. Incumbents invest heavily in new technologies, but new players make inroads as well, with transdisciplinary teams coming to the fore. In terms of M&A, silos are also swept away, with innovative alliances creating new market configurations. International joint ventures abound.

Exploring the critical factors catalysing this scenario ightarrow



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Luxury cruising

- White-water rafting

Sinking ship<br/>Wind-surfing

### Changing burden of disease

A globalised, integrated world creates globalised disease patterns; societies across the world suffer from more or less the same afflictions.

There are regular outbreaks of new diseases; some climate-induced (extreme weather changes). There's also a rapid increase in mentally-related diseases. Changes in the burden of disease are radical, even surprising.

# Development and adoption of new technologies changes existing approaches

The focus of technological innovation is on identifying emerging, surprising diseases and finding appropriate treatments. There's an increase in customised diagnoses and treatments, predictive diagnoses, and the rapid development and testing of new and innovative treatments. Technology development and adoption is proactive, nimble and streamlined, and it creates synergies.

### Migration to more hospitable regions

People migrate toward the availability of good healthcare, or away from areas where new-disease hotspots emerge. However, in some countries, new technologies open opportunities for local virtual healthcare advancements via digital connections. We see: migration from developing countries to developed countries; from one developing country to another developing country with better healthcare; and from rural areas to urban areas within a particular country.

#### **New entrants make inroads**

- Incumbents invest heavily and develop innovative technologies, but new entrants make inroads as well
- New entrants come from non-traditional places and industries, surprising incumbents
- Transdisciplinary teams research and develop products and services

### Weaponised interdependence

The rapidly-changing burden of disease has governments concerned about the healthcare of their people. Governments aim to expand global alliances to:

- Influence geopolitics;
- Offer locational alternatives to healthcare providers;
- Create flexible cross-border networks; and
- Develop deeper R&D integration.



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Luxury cruising

- White-water rafting

Sinking ship<br/>Wind-surfing

# Increasing middle income groups in developing countries

The number of people that reach middle income is increasing fast in many regions of the world. These new middle income groups increase the demand for healthcare, especially in developing countries.

In this globalised, integrated world, middle income groups are far more mobile; this mobility spreads diseases faster.

The growing demand for and access to advanced (beyond primary) healthcare products and services is addressed with innovative technologies.



### What this means for M&A

M&A deals involve global players across all levels of the supply chain and across varying dimensions of new ecosystems created by evolving technologies.

We see M&A activity from and into other industries, outside of traditional healthcare; siloes start to dissolve. New alliances are formed and new market configurations emerge. The distinctions between industries become increasingly blurred.

There are lucrative options for early movers/close followers.

Regulations about M&A deals from governments are based on expedience (how best to achieve appropriate care for emerging diseases).

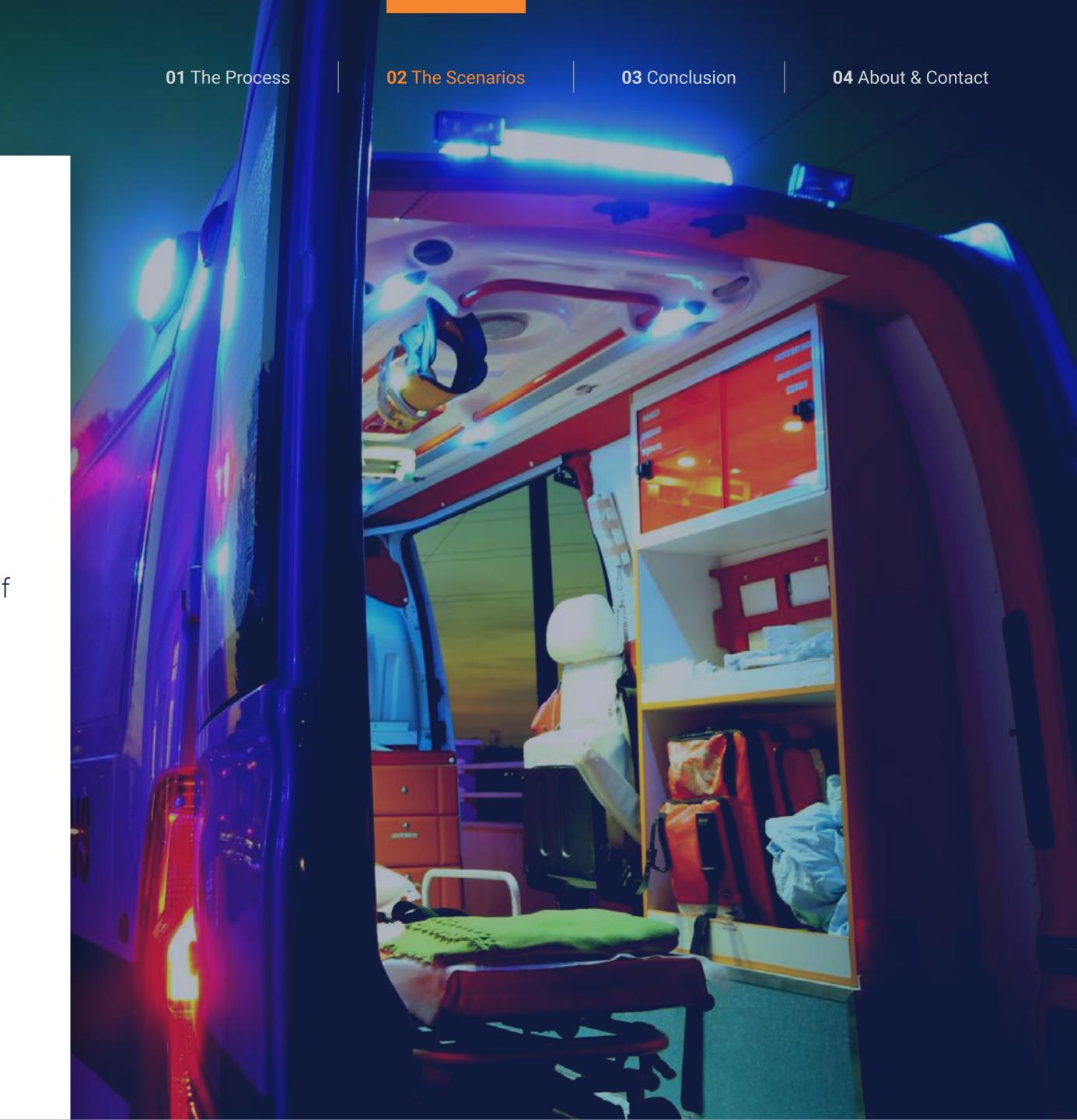
International joint ventures and collaborative agreements are commonplace between tech companies and traditional healthcare players.



# **SINKING SHIP**

In this future, we experience a rapidly-changing burden of disease coupled with the slow development and adoption of technologies. Regular outbreaks of new diseases rock the world, with most societies suffering from similar afflictions. Compliance constraints halt innovation and there's a global dearth of scientists and technology experts. There's major migration as people chase good healthcare options. In this environment, incumbents lose out to nimbler new players. Many M&A deals are derailed by tedious compliance, and deals are often done in certain areas of opportunity only, thus growing the global inequality divide.

Exploring the critical factors catalysing this scenario  $\rightarrow$ 





Luxury cruising

White-water rafting

- Sinking ship

Wind-surfing

### Changing burden of disease

There are radical changes in the burden of disease, which can come as a surprise. Globalised disease patterns prevail in a globalised world, with most societies suffering from similar afflictions. Regular outbreaks of new diseases rock humanity; some climate-induced. There's a rapid increase in mentallyrelated diseases.

### Development and adoption of new technologies changes existing approaches

- The timeous development of new technologies is restrained by compliance constraints
- There's low and delayed returns on investment, plus pressure to make IP available
- There's a critical shortage of scientists and technology experts
- Regulatory processes are outdated and backlogged, and there is a lack of capacity and expertise on fast-developing new diseases

It becomes an ad-hoc approach.

### Migration to more hospitable regions

- Major migration: more concentrated moves to fewer destinations, because there is a smaller selection of countries with good healthcare options available
- · Moving from developing to developed countries; from one developing country to another, and from rural to urban areas
- Migration away from where new-disease hotspots emerge

#### New entrants win this time

- Incumbents engage in opportunistic R&D, but they are behind the curve
- Their efforts are compromised by regulatory and compliance burdens and skills shortages
- Incumbents lose out to more agile and technologically advanced entrants

### Weaponised interdependence

Governments adopt an inward-looking approach to provide the best possible healthcare outcomes for their own people, given the rapidly-changing burden of disease. They implement Luxury cruising

White-water rafting

- Sinking ship

Wind-surfing

policies to compel healthcare organisations to establish their businesses in the local country, and to deter foreign withdrawal of R&D.

# Increasing middle income groups in developing countries

Mobile middle income groups spread diseases faster. Consumers feel hard done by the lack of technological initiatives to address their increasing healthcare issues.



### What this means for M&A

Many M&A deals are derailed, stalled and delayed by extensive compliance requirements. The rapidly-changing burden of disease renders regulations about healthcare M&As inappropriate and ineffective.

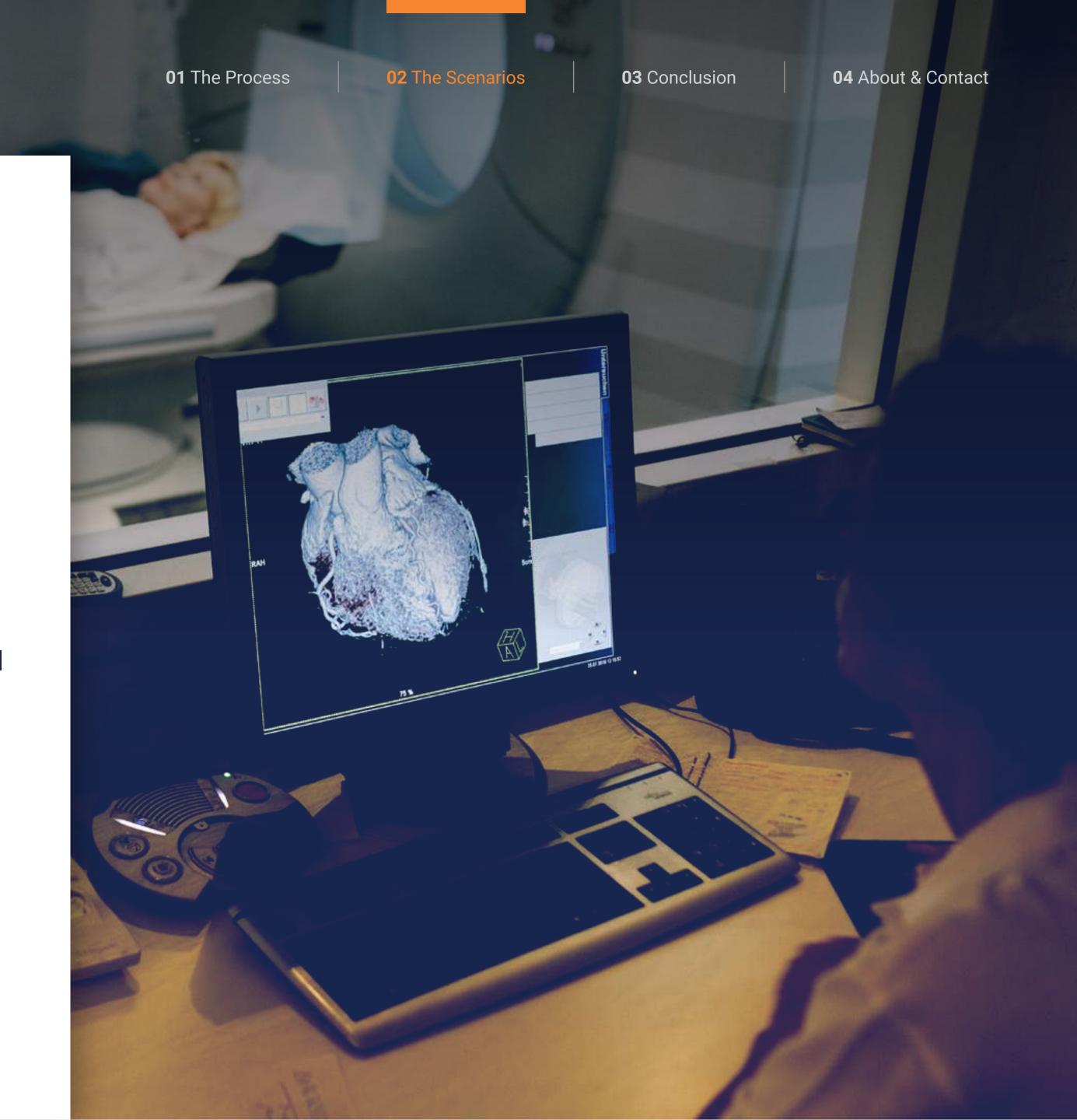
Some organisations enter into mismatched or miscalculated M&As.

Growing global inequality spurs dealmakers to focus on certain areas only; they identify pockets of opportunity and elitism grows through these M&As.

# WIND-SURFING

In this scenario, we still see a slow-shifting burden of disease, but the development and adoption of technologies is gradual also. Incumbents continue to dominate but invest little in R&D. M&A activity is sluggish, with occasional acquisitions by incumbents to get access to technologies.

Exploring the critical factors catalysing this scenario  $\rightarrow$ 





**Tomorrow: 2050** Alternative Futures for Healthcare

Luxury cruising

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### **Changing burden of disease**

Disease patterns (physical and mental) replicate those experienced in the developed world over the last 100 years; therefore, healthcare providers are able to anticipate the evolution thereof with relative certainty.

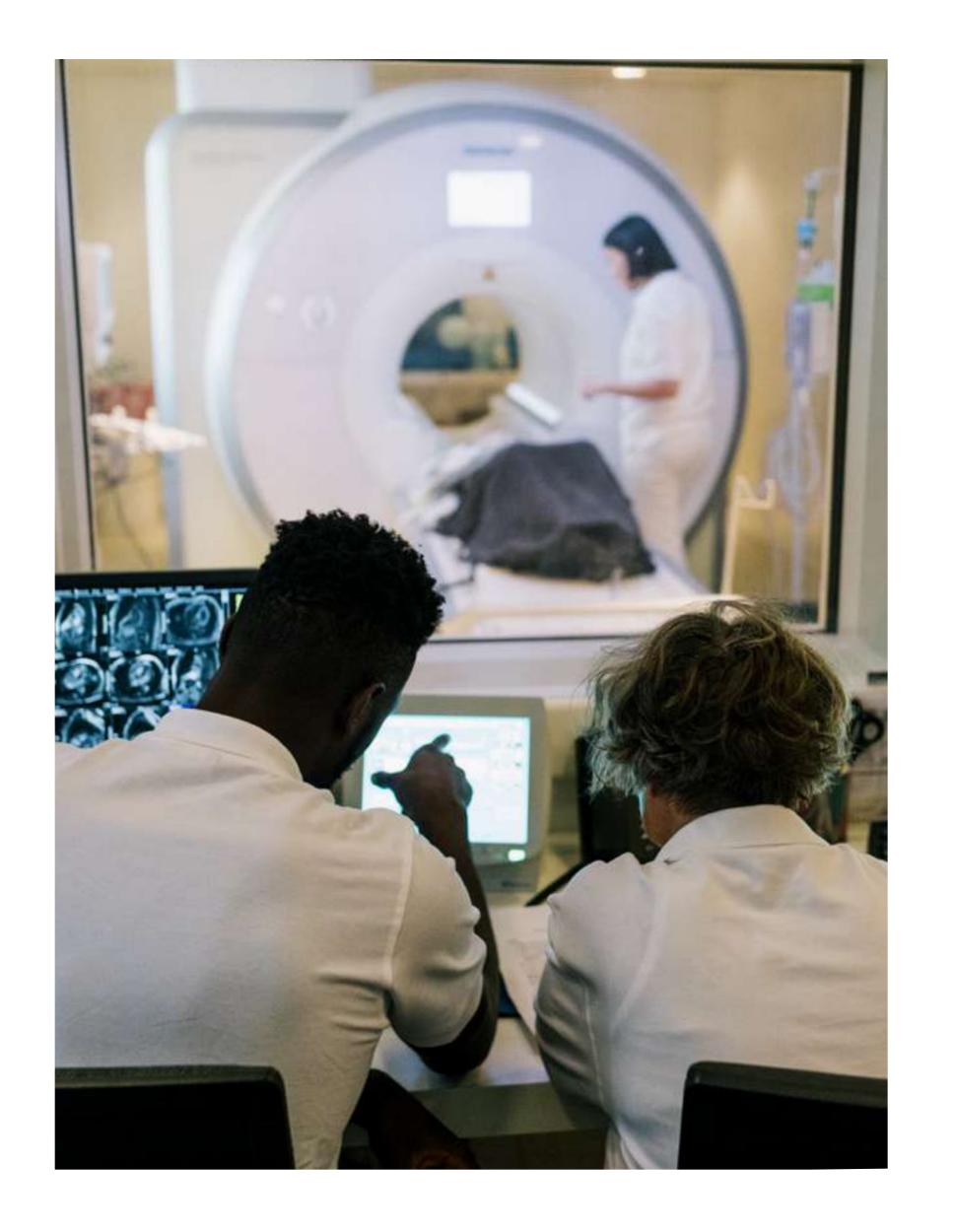
There is a growing resistance to antibiotics; "old" diseases make a comeback; and there's a gradual increase in mental diseases.

# Development and adoption of new technologies changes existing approaches

- Compliance constraints hamper the development and adoption of new technologies
- Low and delayed returns on investment frustrate investors
- Resistance from stakeholder groups regarding ethical issues deters investors as well as scientists

### Migration to more hospitable regions

Economic opportunity drives migration, rather than healthcare reasons. Migration patterns follow the trends of the last 20 years.





**Tomorrow : 2050** Alternative Futures for Healthcare

Luxury cruising White-water rafting Sinking ship

- Wind-surfing

### Weaponised interdependence

Governmentsimplementpoliciestoencouragehealthcare organisations to establish their businesses in the local country. Governments have an inward-looking approach to provide the best possible healthcare outcomes to their own people.

### Increasing middle income groups in developing countries

Global markets shift to the South, especially Asia, but the growing demand is not fully met because of sluggish technological initiatives. Therefore, consumers are frustrated, and have to be satisfied with outdated products, services and treatment options.

### What this means for M&A

The slow-shifting burden of disease, combined with the slow development and adoption of new technologies, creates limited scope for M&A activity.

Some M&A initiatives attempt to strengthen oligopolistic power, but are curbed by government regulations as well as societal resistance.

However, some acquisitions occur where incumbents acquire tech companies, to get access to promoting these new technologies themselves.

What this means for M&A in summary

## **Luxury Cruising**

M&A is driven by incumbents to strengthen their position in existing markets and to acquire footprint in new markets

Slow and gradual shift (fairly easy to anticipate)

Weaponised interdependence

### Wind-surfing

Incumbents look for opportunities in markets where middle-income groups are growing; M&A initiatives attempt to strengthen oligopolistic power

Proactive; Efficient; Adaptive; Create synergies

### White-water rafting

M&A deals involve global players across all levels of the supply chain and across varying dimensions of new ecosystems created by evolving technologies

Rapid and radical; surprising

### Sinking ship

Dealmakers find pockets of opportunity for M&A, but it is complicated by inefficient compliance regulations

Slow; Reactive; Inefficient

**SS** 

carefully thought out, with particular attention paid to the ramifications for M&A. Translink is perfectly positioned to help you navigate these futures and partner your business in every aspect of the journey.



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## **ABOUT**

### The Institute for Futures Research

The Institute for Futures Research undertakes Futures research, trains corporates and individuals in the use of futures thinking tools, and offers various publications to keep clients updated on what is waiting on the horizon. Overall, our services are aimed at helping clients to acquire strategic foresight in order to make better long-range decisions. This will enable them to sense opportunities and mitigate risks in good time.

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# TRANSLINK CORPORATE FINANCE

## **ABOUT**

### Translink Corporate Finance

Translink is a trusted global corporate finance group with deep, local, sectorspecific expertise. Founded in 1972, we have +300 experts covering 35 countries on six continents. We've closed deals in almost every sector imaginable. Our powerful partnerships around the world set us apart. In some industries, we have pooled our global expertise to form Industry Groups focused on serving our clients with deeper insights into global developments and knowledge on targets and bidders in the respective markets.

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