











TOMORROW: 2050

Alternative Futures for Food and Beverage

INTRODUCTION

The global food and beverage market is growing at unprecedented levels, driven by multiple micro and macro-economic factors.

Whether its changing consumer habits and lifestyle trends, growing populations, the constant pursuit of innovation, geopolitical competition and economic power shifts – they are all interconnected and contributing to an ever-evolving industry. Recent global events such as the COVID-19 pandemic and the Russia-Ukraine conflict have severely impacted the food and beverage industry across the globe, with food supply and food inflation among the key challenges expected to persist for some time. But amidst the crises, opportunities are to be found.

Fast-forward to tomorrow: 2050, and will the sector still be booming?

Translink has deep expertise in this field, with 24 experts around the world. We've combined our five decades of experience with insights from the Institute for Futures Research at Stellenbosch Business School to leap forward into the future(s). Together, we've imagined four alternative futures for the food and beverage sector, exploring the implications for M&A.

Ready to dive into 2050? Go on the journey with us.



PURPOSE

The purpose of this publication is to explore alternative futures of the Food and Beverage 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

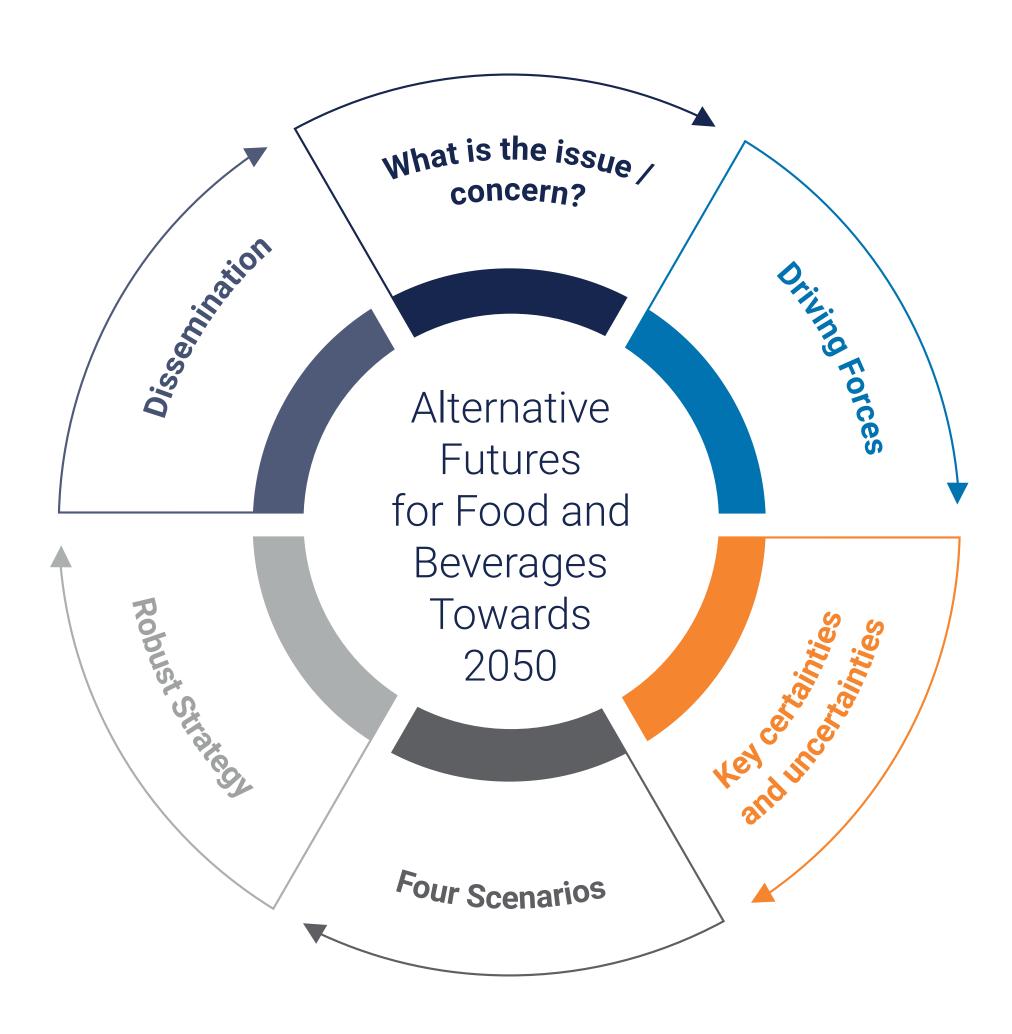
See change as holistic and systemic

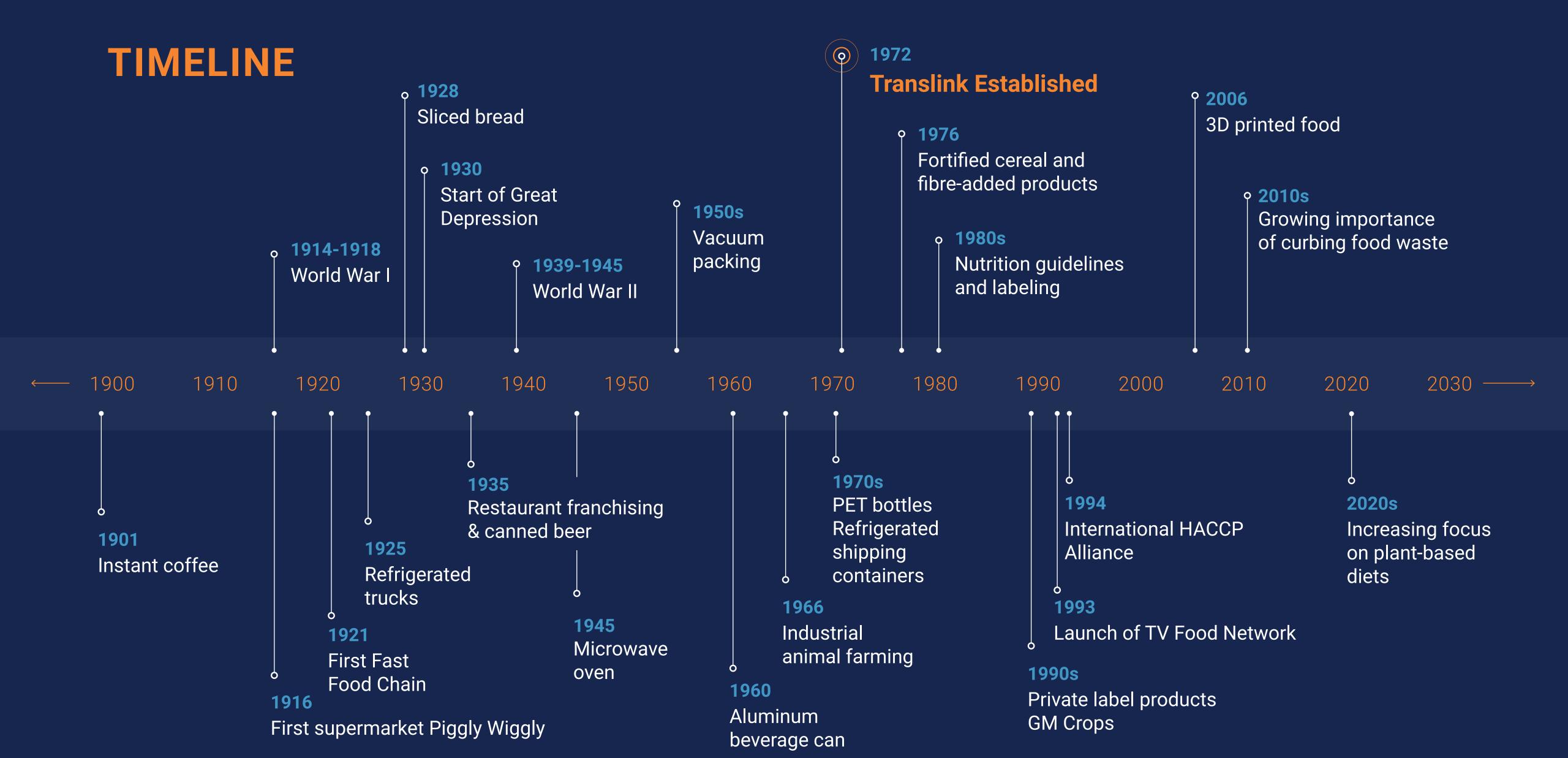


Scenarios offer learning journeys

They enable us to rehearse for the future

THE SCENARIO PROCESS







Political Drivers

• Increasing conflicts, fueled by multiple issues, contribute to food insecurity.

02 The Scenarios

- Growing threat of agro-/bio-terrorism, where agricultural infrastructure and food supply chains are attacked.
- Shifts in geopolitical competition, with increasing competition from emerging regions such as Brazil, China and India.
- Rise in protectionism, and rulers regarding food as an object of national importance.

Economic

- Economic power shifts from its previous position in the West to the East.
- Rising numbers of **middle-income groups** in emerging economies.
- Growing interest from multiple stakeholders in shorter food supply chains.
- Shifting from a linear to a more circular economy, with a particular focus on reducing any waste along the entire chain.
- The plant-based food market continues to expand.

Social Drivers

- World population continues to grow; with Sub-Saharan Africa populations growing the fastest.
- Rapid urbanisation, particularly in Africa and Asia.
- Consumers becoming more **health conscious**, this influences their food and beverage choices.
- ESG (environmental, social and governance) factors continue to influence the F&B sector, with F&B companies facing increasing scrutiny.
- Changing attitudes about **food waste**, resulting in pressure to reduce waste to a minimum, and move toward a circular economy.

Technology Drivers

- Development and adoption of technologies for personalised nutrition.
- Cultured meat an emerging industry. Adoption of the idea of cultured meat and the technologies to support it, are growing across the globe.
- Development and adoption of **genome editing** (where slight changes to the existing genes in a plant or animal are made).
- Development and adoption of 3D printed foods.
- Increased technology adoption across the food and beverage value chain.

Environmental Drivers

- Climate change transitioning to sustainable food systems, with a particular focus on reducing greenhouse gas emissions from the production of food and beverages.
- Increasing **resource scarcity** the growing population and their demand for goods and services puts increasing pressure on natural resources.
- Biodiversity loss as a result of agricultural activities.
- Adoption of natural food sources other than the existing staples of rice, wheat and maize.

Legal / Regulatory Drivers

- More stringent sustainability regulations, to address the growing climate and environmental challenges.
- More stringent health and safety regulations, aiming to counteract increasing obesity and influence other health issues.

Changing attitudes about **food waste,** resulting in pressure to reduce waste to a minimum, and move toward a circular economy.

Successful mitigation of biodiversity loss and climate change; a transition to a sustainable food and beverage sector.

Key uncertainties

A thorough analysis produced five driving forces with the highest levels of uncertainty and that have the highest impact potential.

The "known unknowns"





Scenario-shaping factors

Further analysis produced the two factors that have the strongest influence **ON** the other factors, and are strongly influenced **BY** the other factors

THE 2050 SCENARIOS



Shifts in

geopo

cal competition

Some T

Global cooperation to eradicate hunger but limited development and adoption of technologies for 'new' food and beverages.



Fragmented, inappropriate, unethical, elitist

Development and adoption of technologies

No T

A complex and protectionist environment where nations do not support the development of technologies for 'new' food and beverages.

Shared T

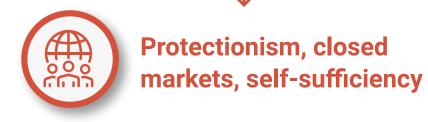
Well-regulated global cooperation and agile development and adoption of technologies for 'new' food and beverages.



Agile development and adoption: ethical, pervasive, relevant

Our T

Nations welcome the development of technologies for 'new' food and beverages, but only for their own benefit and to increase self-sufficiency.





Definition

T represents 'technologies' for new food products and the focus on innovation that drives the market.

T also represents 'tea' as a personalised beverage and one of the most important cash crops globally, playing a key role in poverty reduction and food security.



A DEEP DIVE into each scenario





Some T Scenario

In the Some T Scenario, the food and beverage sector in 2050 sees global cooperation to eradicate hunger with a limitation in the development and adoption of technologies for 'new' food and beverages; however, there is also a strong global pact to mitigate biodiversity loss and climate change. Enabling conditions are created by policies, governance, and a strong focus on regenerative farming. The relatively open markets allow companies that successfully develop technologies for cultivated, 3D printed, and personalised food and beverages, to grow fast.

Exploring the critical factors catalysing this scenario \rightarrow

- Some T

Shared T

Our T

No T

Global cooperation to eradicate hunger

There is global collaboration and support for initiatives to curb food waste, with efficient systems and global agreements to move excess produce to countries with shortages.

There is also a strong global pact to mitigate biodiversity loss and climate change. Enabling conditions are created by policies, governance, and a strong focus on regenerative farming.

Hesitancy about advancing technology

Some nations experience resistance from their citizens against cultured foods and other technological interventions in the food and beverage chain, and therefore opt out of global agreements about its development. These nations, in particular, focus on more traditional methods of cultivation.

New tech only accessible to elite

The development and adoption of appropriate technologies for cultured, 3D printed, and personalised food and beverages happen in an elitist and fragmented manner, leading to nutrition inequality in some places.

The relatively open markets allow companies that successfully develop technologies for cultivated, 3D printed, and personalised food and beverages, to grow fast. Their main target market is consumers in higher income brackets. Some of these companies become monopolies that now dominate certain segments. However, there are also instances of companies that develop these technologies in an unethical or unsustainable manner. Given the relatively open markets, these companies are able to escape scrutiny and prosecution.

What this means for M&A

Although there is limited scope for deals involving new technologies for personalised nutrition, 3D printed and cultured products, the open markets and global cooperation initiatives enable an environment conducive to deal-making across borders.

International joint ventures and collaborative agreements are commonplace between food and beverage brands and organisations that focus on eradicating hunger by distributing excess produce to areas of need.

Interesting opportunities exist in growing markets that create information systems about expected yields of cultivated produce, and the monitoring and reporting on the mitigation of biodiversity loss and climate change.

Some M&As turn sour when it comes to light that technologies for cultivated or personalised products were developed in an unethical manner.

However, some dealmakers are successful in identifying pockets of opportunity in certain areas and within product ranges aimed at consumers in higher income brackets.



Shared T Scenario

In this scenario, global collaboration gives impetus to initiatives to share genetic and biological information to explore and harness the health benefits of personalised dietary advice. Advances in biological science are fueling waves of innovation in the fields of cultured meat, 3D printed foods and personalised beverages. There is a strong global commitment to Sustainable Development Goal 2 – Zero Hunger, and in 2050 significant progress has been made to eradicate hunger across the planet.

Exploring the critical factors catalysing this scenario ightarrow



Some T

- Shared T

Our T

No T

Ethical use of technology is widespread

DNA and microbiome testing to inform personalised nutrition is affordable and widely adopted. A globally agreed, very strict regulatory framework ensures the ethical development of these technologies and the protection of the personal health information of individuals.

Global collaboration gives impetus to initiatives to share genetic and biological information to explore and harness the health benefits of personalised dietary advice.

Advances in biological science are fueling waves of innovation in the fields of cultured meat, 3D printed foods and personalised beverages.

Global commitments and free trade

There is a strong global commitment to Sustainable Development Goal 2 – Zero Hunger, and here in 2050 significant progress has been made to eradicate hunger across the planet. There are limited incidences of global conflict and the shared agreements on the movement of basic food and beverages provide structure and almost unshackled free trade in basic foods and beverages across the globe.

Over the past three decades, waves of innovation have reduced waste created along the food and beverage value chain to a minimum. Global collaboration ensures that surpluses are routed towards areas of need.

Regarding the mitigation of biodiversity loss and climate change, enabling conditions are created throughout the food and beverage system for adaptation and mitigation through policies, research, markets, and governance.

What this means for M&A

Lucrative opportunities for deals with a global reach. There is a dual focus to secure local food and beverage supply, and, at the same time, to participate successfully in global markets through resilient global supply chains.

Mergers serve to shorten the food and beverage supply chain.

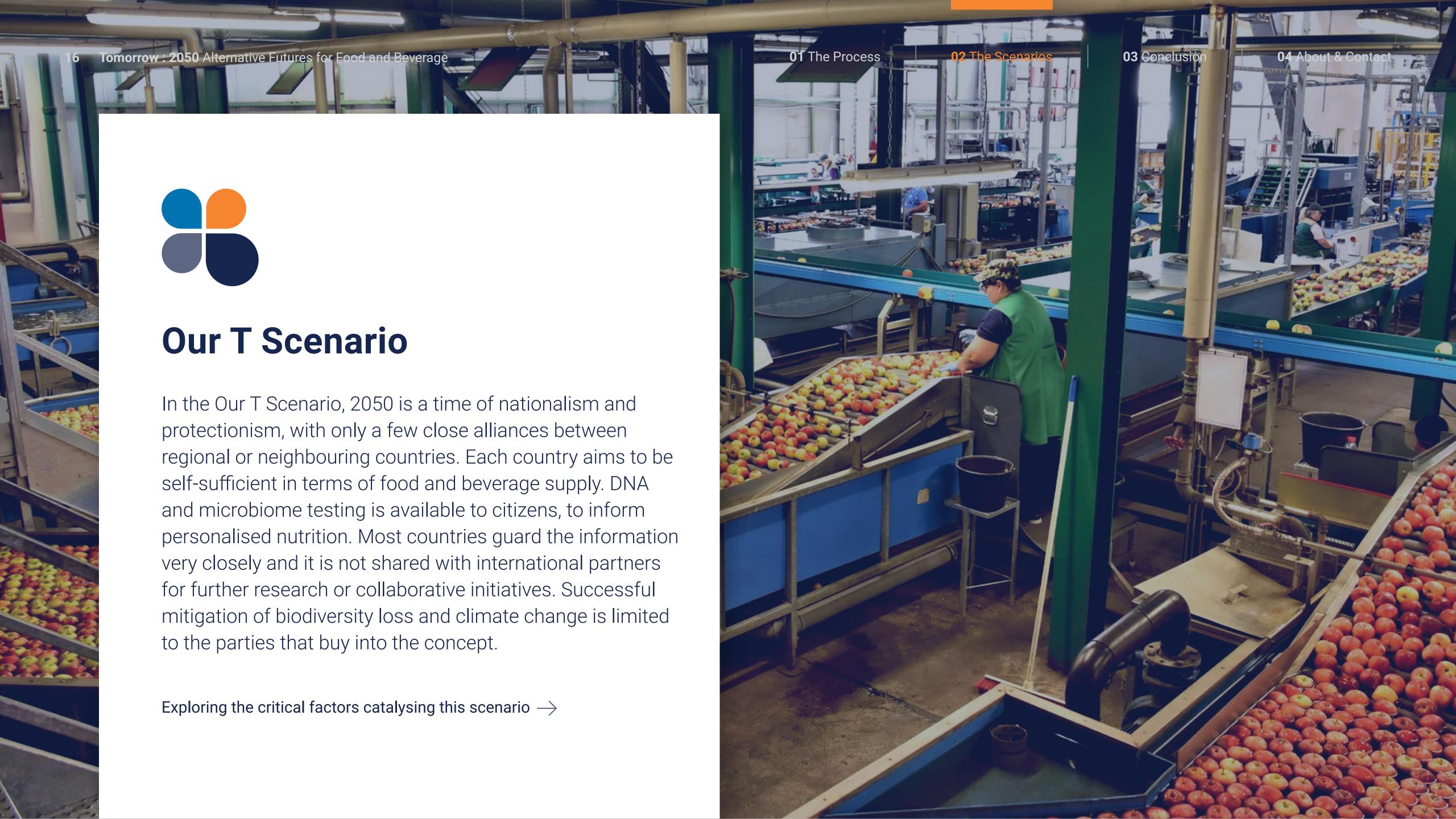
Interesting deals happen to facilitate and support skills development for the food and beverage sector.

International joint ventures and cooperation agreements are commonplace between digital/platform organisations and traditional players.

M&A deals are used to acquire footprints into new markets, particularly in those markets where the numbers of middle-income consumers are growing rapidly.

The adoption of technologies to enable personalised nutrition open M&A opportunities in the new ecosystems between companies from both the health sector and the food and beverage sector.

The well-considered regulatory environment is tough, but clear.



Some T

Shared T

- Our T

No T

Nationalism and self-sufficiency dominate

2050 is a time of nationalism and protectionism, with only a few close alliances between regional or neighbouring countries. Each country aims to be self-sufficient in terms of food and beverage supply. Therefore, governments support and fund research to develop and adopt technologies for cultured, 3D printed and personalised food and beverages. But it is kept for the benefit of the country's citizens and the country's close allies only.

Companies that operate in the food and beverage sector register stand-alone entities in each country. Cross-country trade in food and beverages is very complicated and the regulatory environment tough.

DNA and microbiome testing is available to citizens, to inform personalised nutrition. Most countries guard the information very closely and it is not shared with international partners for further research or collaborative initiatives.

Steady decline in biodiversity measures

Successful mitigation of biodiversity loss and climate change is limited to the parties that buy in to the concept. Therefore, there are pockets of success, but overall, there is a steady decline in biodiversity and a fragmented transition to a more sustainable global food and beverage sector. Sub-Sahara Africa and South America lag behind the rest of the world in this regard.

However, technological advancements to curb food waste are widely adopted, and people are focused on eliminating waste across the whole food and beverage chain.

What this means for M&A

Limited opportunities for cross-border deals; M&A deals have a narrow, mostly national geographical scope.

Good opportunities exist for deals within national borders, particularly for early movers / close followers. First and fast movers gain the advantage in the narrow geographical markets.

M&A decisions are led by profit motives and acquiring 'the next food and beverage technology'.

Government support for deals that increase the country's level of food and beverage self-sufficiency.

Some deals focus on enabling and securing talent and skills development for the national food and beverage sector.

Shared T

Our T

- No T

Protectionism and politicisation of food

Governments regard food as an object of strategic national importance; leading to protectionism becoming prevalent. There is some regional cooperation, but no real global pacts. Geopolitical tensions contribute to the politicisation of food itself.

Misalignment of regulations for food and beverage products between different countries render the market environment complicated to navigate.

Nutrition inequality escalates

Despite a globally-shared aspiration by individuals for improved wellness, in many countries it is simply not affordable. Therefore, nutrition inequality is common, and personalised nutrition is available only to the privileged. Most government budgets cannot accommodate support for the development of these types of technologies, because of too many other pressing issues.

In this scenario, traditional cultivation methods are prevalent, and there is strong competition for natural resources, both within and between countries. The effects of climate change and poorly mitigated biodiversity loss increase this pressure and effects the balance of power across nations.

Increasing distrust of new technology

Individuals are hesitant to adopt technologies for cultivated and personalised food because they do not trust the companies that develop the technologies. Many of these companies have been found to use unsustainable methods and have acted in unethical ways, particularly with the personal health data that they acquired from their clients.

With a strict protectionist, closed market stance, some nations made great strides toward creating a circular food and beverage economy, strengthening local activities in a socially-inclusive way, and creating opportunities for their people to participate in a financially rewarding, yet sustainable manner. Although farming methods remain traditional, alternative produce, with a lighter environmental impact, are cultivated.

What this means for M&A

The strong protectionist stance of governments make cross-border deals difficult. Furthermore, many M&A deals are derailed, stalled and delayed by extensive compliance requirements.

Interesting M&A opportunities exist in countries with a circular food economy focus, and where the acceptance of alternative food and beverage products is growing.

Deals are made between organisations that enable and support regenerative farming within certain geographical areas.

In many areas, the only deals available are the ones that strengthen the traditional supply chain within a national border.

Global cooperation, open markets and trade

Shifts

geopol

tical competition

THE 2050 SCENARIOS

What this means for M&A in summary

Some T

- Limited scope for deals involving new tech for personalised nutrition
- Open markets and global cooperation enable cross-border deal-making
- Joint ventures and collaborations to eradicate hunger
- Growing markets see opportunities for information systems that inform expected yields and mitigation of biodiversity loss
- Some M&As turn sour if technologies developed unethically
- Some dealmakers find success by identifying pockets of opportunity for higher income bracket consumers

Development and adoption of technologies for cultured, 3D printed, and personalised food and bev

Fragmented, inappropriate, unethical, elitist

Shared T

- Lucrative opportunities for global deals with dual focus to secure local food and beverage supply and participate in global markets
- Mergers serve to shorten food and beverage supply chain
- Deals facilitate and support skills development for the sector
- International joint ventures and cooperation agreements are commonplace between digital/platform organisations and traditional players
- Increase in M&A deals to acquire footprints into new markets, particularly targeting middle-income consumers
- Adoption of technologies open M&A opportunities in new ecosystems
- Well-considered regulatory environment is tough, but clear

Rapid and radical; surprising

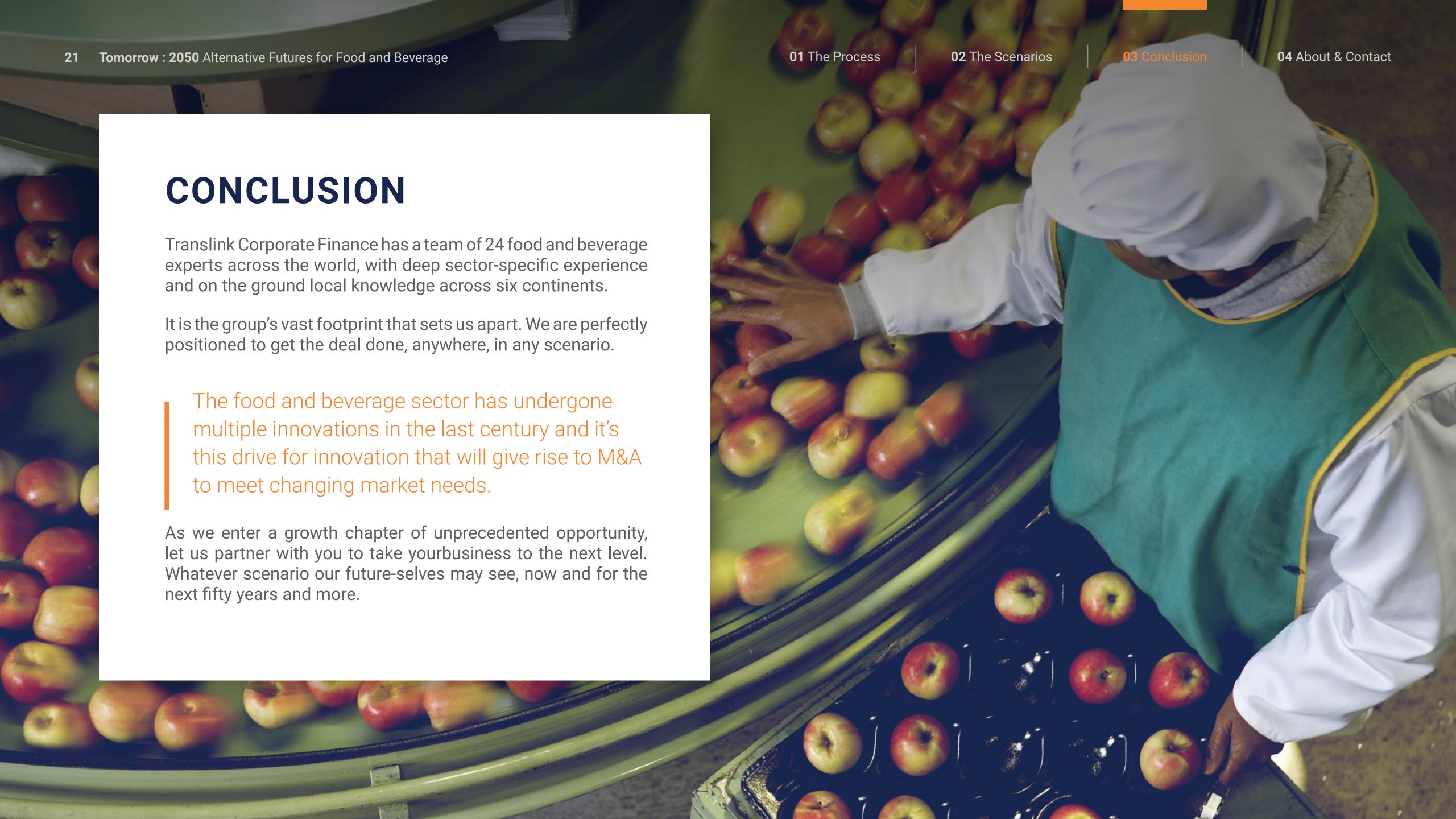
No T

- Cross-border M&A is difficult, and many deals are derailed, stalled and delayed by extensive compliance
- M&A opportunities exist in countries with a circular food economy with acceptance of alternative food and beverage products
- Deals made based on ability to support regenerative farming
- Only deals often available are those that strengthen traditional supply chain within a country

Our T

- Limited opportunities for cross-border deals; M&A deals have narrow geographical scope
- Good opportunities exist within borders
- First and fast movers gain the advantage in these narrow markets
- M&A decisions are led by profit motives and acquiring the next best technology
- Government supports deals that increase the country's level of food and beverage self-sufficiency
- Some deals focus on securing talent and skills development for the sector

Protectionism, closed markets, self-sufficiency





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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, sector-specific 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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Recent Food and Beverage Transactions

For more information on Translink's expertise in Food and Beverage, visit:

https://www.translinkcf.com/industrysectors/food-and-beverage/

















