2b AHEAD

Strategic Foresight 2035

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"*Transformation is not about waving a magic wand that solves the problem and still leaves us living in the same way that we've been living. And that's, of course, a deeper issue. It has more to do with how we view what it means to be human because it connects very directly to our sense of agency. I'd like to put the emphasis on how to cultivate or incorporate into our perspective humility. Not playing God and not thinking that we can control the future.*"

Riel Miller

Executive Summary

This study provides an in-depth analysis of the future landscape of Foresight and its implications. It explores key trends, challenges, and opportunities that will shape the field over the next 10 years. The following are highlights of the main findings:

Strategic Foresight is key for navigating complex and uncertain futures. Until 2035 the uncertainty and complexity will only be increasing, giving rise to a Multi Crisis Environment and driving the demand for Strategic Foresight to address future challenges.

The acceleration of change, new technological possibilities as well as the influence of new generations, will reshape how decisions are made by shifting the focus away from linear developments and the expectations of a steady state 'business as usual'.

Customer expectations in 2035 are rising. The role of Foresight institutions as lighthouses for the future, guiding organizations through turbulent times by example, will be crucial for sustained credibility. Furthermore, the need for an accelerated Time to Value, the deflationary pressures faced by the industry through AI, the validation of Foresight results, and the shift towards implementation-oriented approaches are important aspects of future customer expectations resulting also in the need to integrate AI in sales and marketing processes.

AI and automation in 2035 will be omnipresence for example as AI copilots – not just for decision-making processes but in consulting and Strategic Foresight itself. The value of datasets and natural language as primary interfaces are key, as well as the challenges posed by the explosion of AI-generated Foresight content, ushering in a new era of democratization in the field. However, there are also important limitations of AI to consider.

Two wildcards, "Narrowing Futures" and "Future Abundance", will be presented as an interlude to emphasize the unique challenges and opportunities of these two opposing points on the same scale.

Subsequently, the role of immersive experiences, procedurally generated environments, the ability for reperception in a virtual space and its impact on perceived agency, as well as the concept of persistent futures are discussed.

The chapter addressing emergent disruptions in 2035 explores both challenges and opportunities of the rise of forecasting, the role of decentralized science (DeSci), the potential of AI alignment, and the drive for regenerative solutions as a catalyst for growth in the industry.

Finally, the study identifies and analyzes potential competitors in 2035, including the financial sector, the Open Source movement with future as a public good, hyper-agile AI startups, traditional consulting firms, and the rise of in-house Foresight expertise.

Strategic Foresight 2035 aims to offer guidance as the uncertainty Strategic Foresight is meant to navigate engulfs its own industry as well. Its unique access to knowledge and insights becomes scalable, creating a rapidly evolving landscape, where only those able to seize the opportunities today will be able to shape their future.

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STRATEGIC FORESIGHT 2035

PROLOGUE

"We like to say that the future exists across a spectrum. On one end of that spectrum is the 'push of the future,' and this is things like trends, competitive intelligence, and consumer insights. [They] are pushing us whether we want to be pushed or not, and that's certainly important to us as foresight professionals. We need to know those trends, but it's really just the starting place. The other end of the spectrum is the 'pull of the future.' We are also pulling ourselves to our desired futures."

Frank Spencer

Prologue

Dear Reader and Future Thinker,

Moving from the present into the future is a process shaped by two opposing forces: the push from outside forces and the pull of a clear image of where one is heading.

The aim of Strategic Foresight is to navigate these forces, reduce uncertainty and support decisionmakers as an orientation tool fine-tuned to the complex context of their futures – today, but also in 2035. In the next 10 years, however, much of the known processes, the players and legacy structures of the industry are uprooted much to the same degree as those of our customers.

Especially the recent advances in AI technology have moved the industry into a new hype cycle. The expectations of how knowledge work will be conducted and monetized is shifting dramatically, rightfully calling it the driver for the next technological revolution - effecting every industry, including Consulting and Strategic Foresight.

However, AI is not the only technology having fundamental and tangible implications for the industry in the next 10 years. Immersive Technologies alongside Blockchain and Quantum Computing are converging with AI, opening a plethora of new opportunities.

This study, however, will try not to exclusively look at technology but at a combination of drivers including societal and economic developments in a broader sense, such as the future of decision-making, the underlying changes of the value proposition of consulting, new competitors and new customer expectations, technological limitations and its positive as well as negative implications until 2035.

We aim at reperceiving and reimagining our own industry with the help of a very diverse set of expert perspectives in order to present a shared and consistent image of the future in 2035. The goal is to provide new insights into how the practice of Consulting and Strategic Foresight will shift in the next 10 years, what role new technologies will play in shaping this process, and what set of strategic recommendations should be considered.

We are especially thankful for the industry leaders, the innovators, and the long-term thinkers that agreed to participate in this study. Only due to their willingness to share their perspectives on the future, the most important long-term drivers, and technologies, was this study possible. Their expertise is the crucial ingredient for all the insights in this study – allowing for the narrowing of the wide range of different possibilities into a futures picture of what we describe as Strategic Foresight 2035 in the following.

Without further ado,
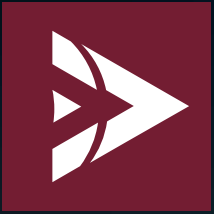
Julia Lampert, Director of Research, PhD

Patrick Duffner, Consultant Strategic Foresight

BIG PICTURE

2035

"None of it is going to go away because it's just exacerbating. It's just compounding. And so, businesses can talk all the 'steady state' environment that they want, but there is no steady state, and our landscape of exponential complexity is not going to go away."

Frank Spencer

The Multi-Crisis

The world of 2035 is balanced on an axis of uncertainty. One of the sides is being tilted by the emergence of a whole range of exponential technologies intersecting with each other, making our current time an era of one of the fastest changes in human history. The other side of the axis is the speedily approaching hard limitations of the planet's climatic systems and its biosphere. Together they interlock into a dynamic, where the advance of one is driving the other, while seemingly being the only viable trajectory towards solutions.

This calls not only for resilience, where business and societies need to systematically take the instability of future systems into account but also creates a context where extreme (weather) events, black swans and disruptive developments are no longer the exception but the norm.

Climate Crisis and Global Decoupling

"We have like a decentralized coordination failure; you have a number of different agents where each agent doing what is in their own rational, authentic best interest in the short term leads to collective behavior that is in everybody's worst interest in the long term. And yet nobody can make the good long-term choice because they lose in the midterm if they do."

Daniel Schmachtenberger (Bankless, 2022)

Until 2035 the trajectory of the world towards its climate goals remains sobering. The effects of a rise of temperature far beyond the goals set by global climate agreements will challenge all existing legacy systems, especially global food security but also consumption, inflation, and the underlying economy. Extreme weather phenomena will impact migration patterns, industry as well as population centers all over

the world. The fight over the right to their own future will especially shape Generation A, not just as a future consumer, but future business leaders, entrepreneurs and decisionmakers.

At the same time, the war in Ukraine will have lasting effects well into the next decade. Regardless of hot or cold military engagement on a global scale, irrespective of actual outcomes or possible escalation, in any scenario the decrease of global cooperation is already locked in, acting in contrary to the achievement of an effective common goal of reducing emissions.

Long term existential threats and far away future consequences regarding the climate are perceived less pressing when faced by more tangible and acute threats. A new war economy is therefore defined by a sustained and systematic decoupling into new global blocks. It is reshaping how the global economy operates and produces at scale, not just regarding strategic resources and products.

Even if the conflict moves towards a resolution in the next years, there will be no timely mend of the underlying perception of threat after the invasion of Ukraine, similarly to how there is no timely mend to the long-term effects of the COVID-19 pandemic.

Intersecting Technologies at Scale

"They're getting very excited by AI and quantum computing is evolving – but I think it's when the two intersect that's when things will get very, very interesting"

Oliver Cronk

We are just on the brink of technological acceleration. A large set of exponential and therefore disruptive technologies – not just AI or Quantum Computing – are starting to move towards implementation. This enables their utilization at scale, intersecting on a deeper level in everyday life, creating entirely new applications and entirely unknown areas of innovation.

This has on the one hand, a very strong deflationary effect, especially on knowledge and centralized institutional structures, but is, on the other hand, also very disruptive in a context of already protracted uncertainty.

For the first time in human history technology is devaluing generational wisdom, making especially the next generation key not just for future innovation and values, but for a unique and intuitive understanding of these new technologies. New interfaces, large scale access and the ability to reimagine systems from scratch will enable and accelerate innovation even more. While Gen X and Y will move towards the geriatric age on the technology scale – becoming less versed in the interactions of new tools – Generation Z and A will successfully leverage this new era of technology.

Furthermore, this steep technological acceleration will widen the gap between what is possible and what is established business practice, accelerating in turn newly leveraged competitive advantages.

However, the biggest impact will be felt in terms of downstream societal shifts these intersecting technologies give rise to. The combined potential of AI, Blockchain, VR/XR, BioTech, Robotics, Quantum Computing etc., will heavily shift not only what is possible and accepted in our society but the underlying power dynamics.

It seems to move the pendulum back towards the individual, small to medium-sized entities operating in a context, where technology is directly challenging much of the established centralized institutions and platforms. This will impact not only all major economic areas but also finance, education, innovation, information dissemination and politics, introducing the world into an age, where humanity might overcome its greatest challenges in an age of innovation.

Beyond the Singularity

Over the last decade the story we tell ourselves about the future has been changing. For a long time, the dominant narrative was one of a future driven solely by technology, promising exponential growth and the conquering of physical, social and natural systems. It culminated in the idea of the singularity, where future and technological progress is not just an inevitability, but the dominant force lead by an extreme valuation of individualism.

With rising uncertainty and existential future challenges, the narrative of the next generation is, however, shifting. The future has become one still shaped by technology, but one that is at its core out of balance. The collective challenge for the next generation is the need to rebalance this system while the expansion of the human mind through new information technology is presenting itself as a collection of ever-expanding possibilities not as a single techno-determinism. Uncertainty is the central force of the future, shaped by the collective ideas of the next generation with the help of AI tools (IFTF, 2023).

The Future Demand of Strategic Foresight

"There exists a huge gap. The demand [of Strategic Foresight] will increase dramatically because many people feel more and more insecure and think that this is the only way of getting certainty. However, they are also those who don't want to risk a fundamentally different approach and really change something. And then there are those who pay for it, and that will also be tighter. Not even considering, that hardly anyone will dare to really think through what that means until the end. And so, the uncertainty will remain for the next ten years. It really feels like crisis after crisis."

Kerstin Cuhls

This bigger context of uncertainty is the main driver for the future demand of Strategic Foresight. There is a widescale agreement from the experts, that the demand for Foresight and practical strategic consultancy is only expanding, as the need to deal with rising uncertainty is also growing. Uncertainty is driving the need for orientation for everyone, a need not just for desired futures but for probable pathways, making it an existential part of directing business not just as a 'nice-to-have'.

In the next 10 years Strategic Foresight will be seen not only as an opportunity to cultivate one's ability to deal with uncertainty but as an opportunity to leverage future to one's benefit, using it as a white space to anticipate disruption as well as empty real estate to play, explore and think creatively. It provides the opportunity to actively build and shape something that does not exist yet to one's own benefit before someone else decides it for them.

In this process Strategic Foresight is first and foremost used as guidance. It provides a strategic north star for an organization, where not just the leadership of a company but all people in the organization share one point in the temporal map of where they are heading.

Today, Strategic Foresight is often seen as more of a luxury item than a true necessity. Especially those who currently benefit from a strong business model can afford to look beyond the imminent challenges towards the horizon of possibilities. Those who struggle, however, are focusing on the short term or the very short term. Others who have a proven concept might close their eyes and hope it lasts. However, this formula is shifting. The rise in intensity and frequency of relevant disruptions are starting to truly affect everyone requiring a reimagination of business models well before existential struggles commence.

Any decision today is affected by how leadership perceives the future. Much of their assumptions are implicit, non-systematic, and largely based on a gut feeling. However, in a time where especially linear assumptions are disrupted, business as usual can no longer be relied on and basic expectations of truth are no longer fulfilled. It is time to make them explicit and systematically base them on probable assumptions. Because despite our inability to accurately predict the future in all its detail, it is worth actively shaping it.

FUTURE NARRATION

Future Narration

He was sitting in front of the old stone wall of the stables soaking in the sunshine. It was his refuge, an old cottage far away from civilization, deep inside the mimosa forests of Portugal. From below the cliffs, he could hear the waves crashing onto the rocks while he was sifting through another file.

He had worked in Strategic Foresight for the last 20 years. This was his last week, after a very tumultuous decade. With the advent of AI, he had led the reorganization of the Foresight efforts of one of the big consultancies finetuning a high-performance hybrid model through quality human feedback and handpicked datasets – the gold standard for reliable AI utilized in decision-making processes today.

"Garbage in, garbage out." He smiled.

He always had a puzzling passion for data science. He even remembered pitching it to his boss when ChatGPT first came out: "Imagine a universal assistant for enterprises. They can feed into it all their proprietary data, making it not just ultimately tailored to their business and current challenges, streamlining processes, and making human labor much more efficient, but also for using it as an ongoing service, an iterative operational and strategic consultant on demand. If you take one of the Open Source Models but operate it in a walled garden approach, where the insights the AI draws from is not only all of the internet, but in-depth analysis of expert networks, long term assessments of curated industry specific leaders – that is the golden goose right there. Imagine, the customer has a Natural Language interface, giving Them not just the answer They needs, but the answers They was not looking for in a context They couldn't even imagine."

She was on board. They developed it, fine-tuned it, and despite some awkward setbacks on the way, they were adding new utilities every year. Last year they added support for probability mechanisms, the Beta Version of the "Wildcard to Immersive Experience Generator" and the ability to interact with individual "Status Quo

Extrapolations" in Unreal Engine 9. At the same time the Dynamic Resiliency Score and the Regeneration Score Teams grew so much, that they had just been acquired by their Chinese partner.

In that moment a light buzzing drew his attention. It was his little drone, beautifully shaped like an insect from another world approaching from the distant. It stopped, hovering over the poppies in his front yard.

Early on they had partnered with a Startup in order to advance AI embodiment. The technology was similar to what Zipline was using for their residential drone delivery system, bringing to market a whole array of different models. All of them were modular to a degree that the customer could create a unique shell for their AI entity enabling true interactions in the office. Later they even added personal shells in cooperation with brands like Pokémon.

The drone approached and asked in her usual perky demeanor: "I have your new headpiece. Should I bring it inside or do you want to try it on right away?"

"You can leave it here. I just wanted to do some proof of concept runs of the new environments Silas generated last night before we hand it to the community."

In the last 10 years purpose had become an overused phrase. But despite the success early on he had lost some of his motivation on the way. So, when the opportunity came to join the Ethereum's retroactive public goods foundation and truly make future permissionless as well as enable an actual and global discourse on different futures he didn't have to think twice.

DECISION-MAKING

2035

"Is the present-day decision matrix of organizations even relevant? Increasingly, smart organizations will see that the present metrics that are guiding their decisions are from a previous, outdated era. They are not relevant in the eras that we're moving into of greater technological speed and social change."

Frank Spencer

The underlying question at the core of the Future of Strategic Foresight and Consulting is that of, how will decisionmaker make decisions in 2035?

Naturally, there will be a range of different processes and contexts on how decisions will be made in organizations over the next 10 years, however, the impacts of the rising uncertainty described above will be felt throughout. At the same time, there is a new generation entering into the market, not just as a consumer but as part of decision-making as well. Both these developments will be enabled by an overarching acceleration of new technologies and tools intersecting with that framework. Especially the rise of AI capabilities will directly impact future decision-making significantly, in some areas even give rise to fully automated decision-making. However, experts agree, that especially high level and strategic decision-making will still be human led, at least until 2035.

The indirect impact of new technologies, not just AI, will also enable new social structures in organizations that will advance decision-making into the future, challenging not only the decision-making framework we have today, but the underlying workings of successful organizations.

The Next Generation of Decisionmakers

EY asked 510 global directors from organizations with more than US$1b revenue and across industry for their perception of enterprise risk management. While organizations have undergone significant transformations over the past few decades one aspect of the traditional business model has remained largely unchanged: the board. However, this might be changing with the main drivers of focus being:

1)   Strategic decision-making

2)   Transformation planning and
         execution

3)   Managing emerging risks

4)   Forecasting and scenario planning

"87% of boards say market disruptors are coming more frequent and 83% say they are increasingly impactful. 80% believe their business strategies need to be more agile and evolve more quickly. Yet boards are currently struggling to focus on long-term strategically important topics such as transformation planning. There is also pressure from stakeholders to deliver long-term value. Yet 43% of board directors say that they spent most of their time on financial reporting while they rather should allot more time for open discussion of emerging trends and potential disruptors (Oinaala & Sutherland, 2022).

Ranking of where boards spend the most time

Respondents could select up to two areas where they spend the most time

(Oinaala & Sutherland, 2022)

Uncertainty: Acceleration and a New Generation

"The world seems to move quicker and faster – exponential in so many ways – that we haven't seen before. So, relying on past and present is not as important as trying to understand what could be the future. And [...] it's going to become much more connected to decision-making in every aspect. [...] States, governments, and organizations will in the future demand much bigger transformations. Transformations in ways we saw through the pandemic and other types of Black Swan events, that are just going demand foresight being tied much closer towards everyday operational decisions that we haven't seen yet."

Ludvig Liljekvist (Copenhagen Institute for Futures Studies, 2022)

Until 2035 one of the core challenges decisionmakers face is that of the acceleration of context. In the next 10 years the basis of decision-making is rapidly evolving into a hyper complex and ever-expanding set of datapoints relevant for successful decision-making. Especially base assumptions and linear projections, that were an important part of an organization's framework in the past – and still are to a significant degree today – will potentially be no longer valid or reliable in the long term.

This leads to a much more adaptive approach reactive to a world that will be even more in flux. At its core this means decisionmakers will have to not only take longer time horizons into account, to ensure the stabilization of the organizations overall vision and goalposts but be more adaptive and agile in their strategic decision-making in the present – as the iterations of both possibilities and challenges move closer together.

While the expansion of business time horizons and the increase of mental adaptiveness will be an important future aspect, it will not fully account for the added uncertainty. According to the experts, there is also a need for a deeper level of future engagement and future-oriented activities. Decisionmakers will have to be enabled to viscerally explore the future as well as raise their own competence level in future lit-

eracy – considering futures that are not a linear extrapolation of the status quo or the expected trajectory of business as usual.

Furthermore, strategies that are aligned with a broader future as well as customer value frameworks and society at large will be highly relevant. This will drive the focus from short-term decision-making further into the future, making it not just more resistant to shocks but aligning it towards the value propositions of the next generations.

Overall, the kaleidoscope of possibilities is expanding together with the possibilities of applied technology at scale – to the point of present-day incomprehensibility. This expansion can be actively harnessed, where the first instinct of leaving it bare is turned into an opportunity to intentionally create viable pathways. Understanding the underlying drivers enables organizations in this process to turn uncertainty into a conceptual canvas for innovation.

In the end, however, only one future transforms into the present, making those efforts of Strategic Foresight that act as an asymptote for that future most sought-after.

Shifting Away from Centralization: A New Focus on Outcome

"You can just move faster and potentially more accurately. This is why I got involved, because I saw so many situations where the people having the power to do things, management, didn't have the context of what's happening on the ground. They make the wrong decisions. They make decisions that make their people completely fucking miserable . [...]

You see so much waste of resources in that context. It's a much better fit when you have the people on the ground that can make the decisions. They can make the right decision."

<div align="right">Magenta Ceiba</div>

Another shift observed by the experts is the shift towards outcome. This shift offers a fundamentally new approach and potentially a significant competitive advantage to decision-making, especially in small- and medium-sized companies as well as networks.

In the next 10 years, this will, disproportionally enabled by technology, challenge big companies, monopolies, and platforms born out of the digitalization era. After two decades of technological drivers towards more centralization current market players are either forced into an expansion of their approach incorporating open source or a next generation of platforms that are defined by permissionless access.

In both cases, the rush for a strategic positioning in the wider context of open source seems crucial, not just for Big Tech but also for start-ups, established brands, legacy institutions, and family-owned business alike.

In any case, the decisionmakers of the future will be enabled by the combined knowledge of the human mind, leveraging it in order to shape their strategic direction-marking around it. Co-operation and collaboration with the community, experts of a field, employees, customers, potential clients and the public at large will be a cornerstone of long-term decision-making,

where even first-principled founders will routinely consider what the combined human intelligence at large has to offer.

The starting point for traditional leadership in this new context is twofold. Firstly, a systematic approach of how to incorporate outside knowledge, starting from within their own teams and intentionally integrating bottom-up approaches and secondly an organizational culture of a high degree of psychological safety for employees, facilitating an environment of accelerated learning through mistakes.

AI Decision-Making: Balancing Automation and Human Expertise

"A lot of the decision-making can be supported by these kinds of tools. And I mean, sometimes you get this kind of question, oh, so you think the CEO will be replaced by an AI? And no, I don't. Actually, if you take a company, I think probably the CEO is the least replaceable person, but you can probably replace the director of finance and maybe the director of HR, because it will do the financial forecasts or analyze the economic situation. Those kind of things seem to be much more approachable and amenable to AI. But to make a choice should we do that, or should we do this – I think the tools can compute the kind of constant likely consequences of the different choices – but someone still need to make a choice."

<div align="right">Fredrik Heintz</div>

Arguably the most disruptive change to decision-making in 2035 will be the introduction of AI technology. The experts widely agree that AI will play a crucial role not only in supporting decisionmakers but in overall enhancing their capabilities. In the next 10 years, virtually every organization will have some form of AI copilot running various aspects of their business. This will enable faster and contextually fine-tuned decisions tailored to individual situations and organizational needs – making high quality AI

support a necessity more than a competitive advantage.

However, this does not mean human decision-making is in any way superseded by AGI. The key advantage of AI is rather its ability to alleviate the challenge of the limited capability of the human mind to process large quantities of information. It reduces the bottleneck decision-makers face in complex contexts by providing a workable interface to filter and extract relevant information from the vast amounts of available data, enabling decisionmakers to make actually informed choices. It combines the strengths of both – humans and AI.

Furthermore, current AI models, especially LLMs, are not primarily designed to be factually correct, making fully autonomous decision-making in need of at least one more iteration of AI evolution before being seriously considered as reliable. Especially complex areas requiring nuanced judgment or presenting seri-

ous liabilities, will still rely on human oversight to prevent erroneous outcomes. However, fully autonomous decision-making could be relevant for lower-level decision-making until 2035.

Overall, AI's value as a supportive decision-testing tool is undeniable. Especially, as an omnipresent sounding board, systematically uncovering potential blind spots and providing non-linear insights to decisionmakers. AI could potentially even be employed as a custodian of certain areas or topics, assisting decisionmakers in aligning decisions within a larger vision or value set of an organization.

Looking ahead to 2035, it is safe to say that all decisions will be made with some form of reliance on AI support. The integration of AI into decision-making processes will become standard practice across industries. And only by actively leveraging AI capabilities, organizations will also be able to recognize its limitations.

The Value Proposition of Strategic Foresight 2035: Informed Uncertainty

"In a world where you have the entire Internet compressed at your fingertips and then fine-tune to your particular industry. How do you add value? You have to be great at novel, unusual approaches! So, I do wonder if what you'll get is a splintering of consulting into something that is really creative and strategic. In essence, really, what should you use consultants for; we should really use them for that - achieve direction and guidance through the uncertainty."

Oliver Cronk

At its core the value proposition of Strategic Foresight in 2035 will be to provide orientation for organizations grappling with uncertainty. This requires a non-standard approach, that provides reliable and genuine long-term insights. In this context the role of the consultant transforms into one not just providing guidance through the rising uncertainty of one single topic but the sum of them – connecting the dots between the different horizons of possibility in different industries. In providing a deeper level of insight and expertise in a way that is accessible to C-Level decisionmakers, Foresight is moving from a mere analysis towards a systems perspective, where the consultant is crafting not just compelling narratives but enabling an actual reframing of the challenges.

Additionally, its value will be measured against its ability to not only provide deep insights and access to reliable expertise but actual guidance in how to navigate future challenges in specific contexts. This will shift Strategic Foresight efforts closer to implementation and even towards individually applicable transformations, providing value through outcomes and tangible insights beyond the perceived horizon.

However, there will also still be value in the classical approach of Strategic Foresight, with a new emphasis on genuinely exploring and envisioning potential futures. It empowers organizations to imagine tangible futures in order to 'walk' into them. It acts as a source of long-term collective motivation, where a coherent image of the future not only binds together the people of the organization but acts as a direct entry way for innovation. This is especially true in the case of developing a deeper understanding for how to leverage new and emerging technologies.

Ultimately, Strategic Foresight ensures that organizations are not merely reactive but hold the necessary toolkit to thrive in an uncertain and rapidly evolving world. This includes fostering an understanding of futures as not a mere linear extrapolation of present trends, but something actively shaped by underlying developments often originating outside one's own industry.

The Discipline of Anticipation

Even though bets about the future are important, they're actually not what's the most important. The fundamental part of what anticipation is all about is contextualizing our attachment to the proposition that the reason, the practical utility and the impact of anticipation is to create a (better) future insofar as it remains tethered and continuously pulled back by the gravitational pull of creating a better future. It confines the way anticipatory capabilities are used. However, if cultivated, our imagination can do much more than simply help us to make bets – it opens up the potential of the present that go beyond what we know from the past.

"We're currently excessively obsessed with planning and controlling the future. Imposing our will on the future and we think that that's a good thing. This apparent positive and important necessity to construct things that last – whether it's a building, a pyramid, but also reputation or legacy. There's a bias in human societies towards systems and approaches reproduces hierarchy as a way of creating a sense of security, only the constant surprises and creativity of the emergent present point to another approach, one that embraces spontaneity, improvisation, and novelty."

Riel Miller

CUSTOMER EXPECTATIONS 2035

"AI tools promise to make lives easier. And they will make lives easier. But they will make consulting work harder for people who can't compose original thinking."

Chris Lockhart

The accelerated landscape of 2035 also significantly impacts customer expectations. Strategic Foresight is not a monolith, nor are its customers. However, there are some key aspects the experts point to in order to identify the underlying forces shaping the demand side of the equation in the next 10 years, including the perceived credibility of Foresight institutions, a faster Time to Value, the deflationary pressure of automation, the desire for validated results, the shift towards implementation, and the influence of AI on customer interactions.

In this dynamic landscape Strategic Foresight must find a new alignment with these evolving customer expectations in order to find the product-market fit that establishes themselves as a trusted partner and drive meaningful value.

Foresight Institutions as a Lighthouse: Leading by Example

People will ask me: Are you living in the future? Is everything you do, everything you think a reflection of your future thinking already? In Chinese we called it ＂知行合＂ —（the unity of knowledge and action), then what you say will be more persuasive to them. So as a practitioner you need to practice foresight yourself.

Lynn Lin

In 2035 customers will expect Foresight institutions to lead by example. Merely discussing future approaches will not be sufficient. Customers will require organizations to implement future approaches themselves in order to remain credible. They will expect Foresight institutions to demonstrate the embrace of new technologies, driving the innovation of their own products and services – providing tangible proof not just of their own expertise but of their forward-looking mindset.

The role of Foresight institutions is privileged when it comes to shaping the future of organizations. This raises the bar for inspiring confidence, requiring Foresight institutions to embrace cutting-edge tools, processes, and technologies instead of lagging behind. Future needs to become visible to the customer. To convince them and maintain relevance, they must demonstrate a commitment to staying at the forefront of not just their own field by adopting and implementing leading-edge approaches in different areas.

Especially technological advancements in the field of AI, the Metaverse, immersive technologies, and blockchain technology hold immense potential for making the future tangible today. Foresight institutions must identify avenues to actively engage with these technologies and leverage them as tools for their own operations.

In addition to technological advancements, Foresight institutions also need to lead the way in social advancements related to for example new work paradigms. As the nature of work continues to evolve, institutions must explore and implement innovative approaches that support new forms of collaboration and value creation. By being pioneers not just in technology, Foresight institutions are enabled to inspire confidence in a new and complex world.

Engaging with future concepts today makes the future experiential for the customer. Foresight institutions can provide these tangible glimpses into the future by going beyond theoretical concepts and actually implement the future and its practical use cases in the day-to-day operation. This underlines not just the very real implications but increases credibility as a lighthouse, offering inspiration through actions and demonstrating not only expertise but practical examples to follow.

STRATEGIC FORESIGHT 2035

Faster 'Time to Value': Meeting Clients Where They Are

"There is a cost driver, right? And it's going to change the speed at which clients are going to expect value – not just results, but value out of the thing. Whatever The thing is. Clients want value. They will be caring less about the results or the outcomes, they want valuable outcomes, and they want them faster."

Chris Lockhart

In an era of rapid technological advancements and increased competition, clients seeking Strategic Foresight services have overall heightened expectations. This is especially true for the expectation of faster Time to Value. Delivering value, not just outcomes or results, is the key when the timeframe is shrinking. However, with timeframe costs also expected to be shrinking, shortening not just traditional project timelines but also the resources available for the pursuit of rapid high quality results.

This becomes only possible with a systematic integration of knowledge automation as well as actively synergizing processes and new partnerships. Especially the decreasing costs of (qualitative) data analysis, technology infrastructure, and new tools for automation will be a gamechanger in the eyes of the clients. They decrease the cost, at least in the perception of the clients, but also the time required to achieve valuable insights in an accelerated timeline of decision-making.

Currently Foresight and Consulting results are still meeting client demands, however, over time clients will demand even higher value. It is no longer enough to deliver insights, identify gaps, or highlight problems and opportunities. Clients will require tangible value that directly impacts their business outcomes. They seek Foresight institutions that can provide actionable recommendations, strategic roadmaps, and practical solutions to their specific challenge.

In the meantime, the stereotype of the first few weeks or months of a project being dedicated to data gathering, analysis, and insights generation is being absorbed by the shortening of timelines. These initial phases are condensed into a matter of days, while the quality expectations and the expectation for individualized products remain or even intensify. Especially in an era where market dynamics are rapidly changing, clients recognize the need to swiftly adapt and seize opportunities making speed a necessity to thrive in an even faster-paced business environment.

Deflationary Pressure: Navigating Competing Forces

"It's a downward spiral. Everyone says, yes, you can automate that. But when you take a closer look, it's usually not that easy. But the customer …expects it, of course. And (…) you can no longer price people correctly. …. The problems and constraints are no longer visible and it is expected that you can more or less automate everything."

Kerstin Cuhls

The rise of automation is exerting an immense deflationary pressure across all knowledge-based industries, including Consulting and Strategic Foresight. Clients will not only expect faster Time to Value due to the perception that automation makes everything more accessible, but also much more affordable. However, this deflationary pressure is more nuanced, including a potential overestimation of automation capabilities as well as the implications to the industry of potentially making foresight services much more widely available.

AI tools and processes are creating an expectation among clients that knowledge services will be available for a much smaller premium. However, experts are warning, that the current hype may also lead to a stark overestimation in capabilities. Today, not everything can be automated, especially not high-level original insight. High-quality Foresight services often require especially those kinds of insights that machines currently cannot fully replicate.

Furthermore, the context of a tight economic landscape additionally decreases the perceived need of premium services that might also be automated inhouse. The increase in competition driven by automation enters the industry into a downward price spiral, where quality assurance becomes crucial for competitive pricing.

However, automation and widely available tools also shift Foresight from a clear focus of being a luxury service towards more democratization where insights are widely accessible to everyone. The deflationary pressure caused by automation and competition is unlocking a mass market, where these services are utilized at scale. This does not necessarily end the demand for high-quality insights and personalized approaches. However, Foresight institutions must strike the right balance between affordable and scalable services for a mass market and the maintaining of more traditional high-value experiences with higher margins.

Validation of Results: Establishing Trust

"There is a paradox in Foresight. People really want to know the future like a Fortune Teller. 'Tell us, which direction are we going?' Meanwhile they're very skeptical. 'Why should I believe you, that this is the future, not the other one?' In terms of credibility, people really want to confirm whether they can trust the result."

Lynn Lin

Clients seeking Foresight services often have a dual expectation of practicality and skepticism. The desire to understand industry trends – where their business is heading – competes with the uncertainty of the future and the quality assurance of the insights and results. Until 2035 the need for validating results is a key concern for clients. This includes the importance of establishing trust, and the challenge of developing a robust evaluation process.

Clients are seeking concrete practical insights and actionable recommendations to inform their business strategies. However, they also understand the inherent uncertainty of foresight, the challenges, and limitations of trying to anticipate futures. Striking the balance between both is the basis for establishing trust in the results as well as a reliable and systematic process based on the analysis of reputable expert perspectives and transparent, iterative methodology. Finally, the track record of successful projects and the successful identification of important industry trends will also be a factor.

Overall, the validation of foresight results always also lies in the value the project occurs for the client in its context. Universal metrics for evaluation, like traditional business metrics, are less applicable in the field of Foresight as

they rely on historical data, not the successful navigation of unknown futures. The overall uncertainty and complexity involved in anticipating futures make it difficult to establish precise metrics for assessing the value or accuracy.

Building long-term partnerships with clients also positively affects trust and the validation process. By demonstrating a commitment in long term implementation, adaptation and the refinement of results, institutions can evolve alongside their clients' changing needs.

Shifting towards Implementation: From Insight to Impact

"A successful foresight institute should be a thinker and also a doer. It is not only a ThinkTank, but it also involves itself into the actions to really bring the future to life. If Foresight can be part of the making of future or maybe in close collaboration with the company, it will be more useful and also more persuasive."

Lynn Lin

The landscape of Foresight is experiencing a notable shift towards practical implementation. Clients increasingly seek not only insightful forecasts but also actionable strategies and tangible outcomes.

In the next 10 years the aspect of implementation becomes central for foresight. Clients no longer view Foresight as a purely exploratory exercise or a marketing effort but instead seek an active translation of the findings into tangible actions. Foresight institutions that preempt this shift towards implementation and collaborate closely with clients and their needs will not just provide more valuable results but gain an advantage over their competitors.

While the exploration aspect of Foresight remains crucial to all subsequent efforts, the real challenge, in the eyes of the experts, lies in the implementation stage. Clients increasingly expect Foresight to go beyond the theoretical description of future and actively support them

in identifying and executing the necessary actions towards that future. Foresight institutions must evolve to meet this demand by developing approaches that effectively bridge the gap between insight and implementation.

This means, that Foresight needs to invest into new skills and resources to enable the facilitation of practical use cases and specific recommendations. This includes the offer of clear guidance on how to achieve a suitable roadmap and translate the finings into impactful actions within the organizational context, including guidance on specific actions tailored to practical strategies.

This also establishes a longer-term commitment and close partnership with the client, actively involving them throughout the process and co-creating the process of implementation. It requires insights to be directly relevant and actionable in order to drive meaningful change in the organization.

Sales and Marketing: AI's Transformative Impact

"We're gonna need to fight fire with fire. If we generate so much more content, we're gonna need help, because we're already overloaded. We're already drowning in the fire hose. And so, in future AI augmentation will help us not just generate content but also sort of manage and process it."

Oliver Cronk

The integration of AI in sales and marketing processes is reshaping how businesses engage with clients. It is changing how sales and marketing teams access clients, giving rise to a new era of AI gatekeepers in an overload of automated content.

Traditional marketing approaches, such as cold emailing, are becoming increasingly unsustainable in today's digital landscape. Clients are inundated with generic and unsolicited marketing messages, leading to a decline in response rates and engagement. AI offers an opportunity to move away from these ineffective tactics in order to embrace value led approaches.

AI gatekeepers enable an automated entity to act as the filter for any information or request. Breaching this gatekeeper will be the task of a new marketing and sales approach until 2035. In the next 10 years, generative AI will massively inflate the value of content, increasing the necessity to pre-filter irrelevant or low-value content and increasing the value of the client's time, attention span, and cognitive capacity. According to the experts, the access to clients will likely be granted by the AI only to content that provides actual value, ensuring that engagements are meaningful and productive.

Leveraging AI gatekeepers will therefore be the main focus of sales and marketing efforts, encouraging teams to embrace this new channel. Instead of bombarding clients with generic messages, businesses will need to deliver content and interactions that appeal to the AI gatekeeper and meet the specific needs of a client. AI-powered communication tools and AI channels will enable an overall efficiency gain where value-oriented experiences will not be optional.

Overall, the integration of AI in sales and marketing will revolutionize the way businesses access clients. The approach of valuable engagement will replace the approach of content overload, driving meaningful client interactions and growth.
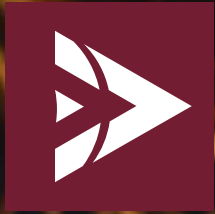
AI AND AUTOMATION

2035

"I think that when it comes to automation and AI, there's so much opportunity there to help to outsource the tasks that we don't need to do so we can focus on the things that actually truly add value. It's just that those decisions of where you choose to implement AI need to be done really carefully."

Joanna Lepore

Speed Running the Possibility Space

The integration of AI and automation is set to transform the Strategic Foresight industry by enhancing efficiency and accessibility. Experts are of the opinion, that if you are a consulting company – no matter if you're pureplay strategy or strategy and execution – if you do not have an AI practice up and running today, you're behind.

In the following the role of AI as a copilot, as well as the value of high-quality datasets, natural language interfaces, the explosion of automated or partially automated content, the democratization of consulting services, and the limitations of AI will be explored, as the Strategic Foresight industry will be profoundly influenced by the way AI and automation is integrated in its processes.

The Omnipresent Copilot

"I can give you all the data in the world and I can say that my AI tools gonna give you more data and the data is better and it's faster and it's bigger. And it's not a data lake – it's a data ocean or a data planet or whatever the hell, a data universe. All this data, I've got so much data. It knows everything. But if nobody understands it, and if you the consultant, can't help me – what the hell am I supposed to do with it? If I can't meet my corporate objectives then it's useless. It's completely meaningless, right?"

Chris Lockhart

With the advent of industry specific fine-tuned LLMs, AI will become ubiquitous as a Foresight copilot. It will not just serve as a standard assistant, but as a highly individualized strategic consultant with access to all the background data of a project. Acting as a copilot, AI Foresight assistants will work alongside human experts to provide relevant long-term insights based on a dataset specific to the industry. By leveraging these AI tools, Strategic Foresight professionals as well as clients will be empowered to access much larger datasets, both qualitative and quantitative, that help them navigate decisions and complex contexts much more effectively. This has the potential to truly revolutionize the field by not just stripping away errors and speeding up processes but by really augmenting human capabilities significantly elevating the quality of the results.

AI Foresight assistants will be trained to be Foresight experts and consultant at the same time. They will amplify human capabilities by accessing information and context faster, offering vast amounts of pre-filtered data. They also serve as a valuable sounding board facilitating critical thought processes and the exploration of counter perspectives, challenging assumptions, and offering alternative insights.

By working in tandem with humans, AI copilots such as ChatGPT elevate performance and productivity particularly when working with very large qualitative datasets common in the field of Foresight. These models excel in language, enabling them to synthesize key findings from long-text formats, such as expert opinions or reports, enabling deduction at scale. This fundamentally revolutionizes qualitative research, freeing it from the constraints of small datasets and unlocking new possibilities for comprehensive analysis and trend identification on a massive, global, and cross-language scale.

Furthermore, AI copilots will, in the next 10 years, become more and more capable of contextualizing data for specific industries, needs, or situations. Already today they can be fine-tuned to understand the nuances and dynamics of various sectors, enabling truly tailored insights and recommendations in the long-term. This contextualization enhances the relevance and applicability of Strategic Foresight, ensuring that the generated insights align with specific client requirements.

The future role of AI in Strategic Foresight might be better described with the term 'Augmented Intelligence', rather than artificial intelligence, as the value of AI copilots uniquely lies in complementing human expertise, acting as personalized systems that enhance human productivity. Until 2035 they will first and foremost work in synergy with humans, leveraging AI's

computational power and data processing capabilities to generate more comprehensive and accurate foresight outputs based on the original thought, the experience, and the judgement of the professional.

While AI copilots offer immense value, they also have limitations. LLMs are trained on a very specific knowledge bases (language) and will always be constrained by their training data. They may therefore – also in 2035 – still suffer from a problem described as the "stochastic parrot", where they can only reproduce what they have been trained on despite continuous updates and improvement to adapt them to emerging developments.

In any case, the emergence of high-performance AI assistants presents a significant business opportunity in the Strategic Foresight industry. Those who can develop and deploy AI copilots that excel in generating valuable insights, contextualizing data, and actually enhance human capabilities will have a steep competitive advantage. It is a new business model that offers tailored and on-demand Foresight services for everyone, transforming not least of all the way clients engage with Strategic Foresight.

The role of AI copilots could further be empowered by the ability to run these assistants on edge devices such as laptops or smartphones. This shift towards edge computing allows for an even greater accessibility and convenience, as AI assistants can operate standalone without

relying on massive cloud infrastructure. By leveraging the computing power of local devices, AI assistants could deliver real-time insights and recommendations directly to users, enabling them to access and interact with valuable Foresight information even in resource-constrained or offline environments. This capability significantly enhances the versatility and practicality of AI Foresight assistants, enabling professionals to harness their power anytime and anywhere, making them an integral and ubiquitous part of decision-making processes.

Dataset as True Value

"We find that when you wall-off the data, the AI performance goes up dramatically. Because there are no hallucinations. There's not a separate competing sort of framework and set of ideas that are dissonant. Whenever you tune it to the Internet, there's just so much out there. It creates an issue of fidelity. When you have your own dataset, and you know what's in your dataset the ability to analyze it – to be able to use it – is actually pretty extraordinary."

Brian Lee

The true value of AI in Strategic Foresight lies in the ability to fully utilize high-quality datasets. AI algorithms rely on robust and diverse data sources to generate accurate, actionable, and valuable insights. Organizations that prioritize curating and collecting high-quality datasets will therefore gain a competitive advantage in delivering Foresight services in future.

Data plays a crucial role in enabling the success of AI systems in any field. While there is a growing recognition of the value of datasets also in the field of Strategic Foresight, there is still a lot of potential. In the perspective of the experts, the evolution of the datasets will be a shift from maximally large datasets towards maximally high-quality datasets, focusing on what is often referred to as 'thick data'. This emphasis on quality over quantity allows models to continue improving non-linearly by incorporating relevant and reliable information over non-useful or even bad data.

Thick Data

While large datasets have been instrumental in training AI models, there is growing recognition that the quality, diversity, depth and relevance of the data are equally important for achieving high performant AI systems.

As AI applications become more specialized, there will therefore be a shift towards creating increasingly more domain- and task-specific datasets. Instead of relying solely on generic datasets, there will be a greater investment in curating datasets that cater to specific industries, such as healthcare, finance, or consulting. These datasets will be tailored to capture the nuances and challenges of that particular industry, enabling more accurate and context-aware AI models with key players providing datasets with specific quality standards for every industry.

Finally, collaboration and data sharing among organizations, researchers, and even individuals will become more prevalent with distributed approaches facilitating the creation of large-scale datasets through aggregation from multiple non-centralized sources (Diamandis, 2023b).

As specific high-quality datasets become more prominent, there will be an emergence of specialized models tailored to specific domains. Rather than relying on generalized models that average over diverse data sources, the focus will be on models fine-tuned to specific datasets, resulting in more reactive, contextual, and accurate insights. This presents an opportunity for those who already possess high quality proprietary sought-after datasets, such as Strategic Foresight institutions with large panels of expert insights that are up-to date.

Meanwhile, fine-tuning models using proprietary datasets is relatively straightforward. By additionally walling off the dataset, AI models can largely avoid the issue of hallucinations or generating outputs that are inconsistent with the information in the dataset. However, the human role of compiling high-quality datasets remains crucial. Data scientists who understand the input side of AI play a key role in ensuring that the right data is used to derive meaningful insights.

Until 2035 there is a competition between open source approaches (public datasets) and proprietary approaches (private datasets) of high-quality datasets possible. Open source initiatives have a competitive advantage in providing access to truly diverse datasets in the future. This accessibility also fuels the current growth of startups and new business models built upon foundational AI models, leading to potential breakthroughs in the coming years.

Synthetic Data

Synthetic data refers to AI generated data that mimics the characteristics and statistical properties of real-world data. It simulates data patterns, distributions, and relationships found in real datasets and is designed to be representative of the original data but does not contain any of the real data. The advantages of synthetic data is that it is cheap and easy to create and can be perfectly labeled.

The StartUp Betterdata based in Singapore uses for example programmable synthetic data to keep real data safe. It has just raised $1.55 million in a seed round led by Franklin Templeton, Xcel Next, Plug and Play and others (Shu, 2023).

Furthermore, synthetic data can be generated in large quantities, providing an abundant and scalable resource for training AI models. This enables researchers to overcome limitations imposed by the scarcity of real-world datasets.

However, the quality of synthetic data heavily depends on its ability to accurately represent the complexities and distributions of real-world data. Ensuring that synthetic data adequately reflects the characteristics of the target domain remains a challenge, as discrepancies may lead to suboptimal AI models. AI models trained solely on synthetic data might therefore struggle to generalize to real-world situations (Fridman, 2023c).

"And so if an LLM generates (…) all kinds of content can you use that to train the next version of that LLM? Specifically, is there a signal in there, that's additive to the content that was used to train the LLM in the first place? (…) The point is – can you arrive somewhere new with the data you gave the LLM to train?"

Marc Andreesen (Fridman, 2023c)

In conclusion, machine learning heavily relies on data and its importance cannot be overstated. Experts go as far as saying that in the future basically 99% of the effort in a successful machine learning project is attributed to the quality and availability of data, with only 1% attributed to algorithms. Given the relative stability of machine learning algorithms, the majority of businesses do not need to invest significant resources in new algorithms but rather focus on acquiring and utilizing high-quality data.

NL as the Primary Interface

"Natural language is now the primary interface that we're going to use to describe things even to computers. It's a huge advance."

Bill Gates (Microsoft, 2023)

Until 2035 the experts expect the primary interface for AI and even the majority of the digital space to be natural language. Natural language processing and generation capabilities will in the next 10 years enable seamless communication between humans and AI systems. This new interface will not just enhance accessibility and usability but also make AI-powered Foresight tools much more user-friendly and intuitive.

It will revolutionize how people search for knowledge, moving away from traditional search engines like Google or Wikipedia towards a conversational dialogue with AI assistants. Furthermore, it enables users to interact with primary databases, platforms, customers, and services directly through seamless conversations. It unlocks the potential for accessing both vertical and horizontal knowledge, allowing individuals to navigate and explore a wide range of information effortlessly and potentially fully automated.

The ability to summarize and present complex data, be it extracting key insights, perform analyses or present information through natural language elevates the information network of the internet. It democratizes access to knowledge, paving the way for a second information revolution, where the power of knowledge – not just information – is placed in the hands of everyone.

The Explosion of Content

"We have an ever-increasing flood of information regarding the future, some of it automatically generated. But no one can find their way around it anymore."

Kerstin Cuhls

AI is currently ushering in a new era of content. As automation becomes more prevalent, AI systems will generate vast amounts of information every second, including Foresight reports, analyses, scenarios, and simulations. This proliferation of content will provide both opportunities and challenges, requiring efficient content management and curation strategies to extract meaningful insights.

According to the experts, AI-generated future-related content will lead to a tremendous increase in volume, potentially growing by a factor of 10x, and potentially as much as 1000x. This flood of content will offer unprecedented access to diverse perspectives and insights about the future, however, increasing the need for quality assurance, original thought, and orientation.

At the same time, this kind of proliferation of automated content presents the risk of recycling similar ideas and perpetuating mainstream ideas and dominant narratives of the future. It can easily result in a narrow, repetitive, and one-dimensional landscape of futures, based not in probability but scale or dominance, making the identification of true insights even more challenging.

Furthermore, as AI-generated content becomes more prevalent, the value attributed to traditional knowledge work, including Strategic Foresight, will diminish dramatically, undermining the perception of expertise by a human consultant beyond what AI systems can offer.

In a world inundated with content, competition for attention becomes increasingly fierce. Strategic Foresight professionals and institutions will need to find innovative ways to stand out and differentiate themselves amidst the vast sea of information. Crafting compelling narratives, asking thought-provoking questions, and providing actionable insights based on verifiable expertise will become essential for capturing and retaining customer attention. Despite the abundance of content, the ability to ask the right questions remains valuable in the long-term – making human consultants who possess the skills of asking insightful questions, challenging assumptions, and exploring truly emerging trends important in the future.

The Democratization of Strategic Foresight

"In the future, AI will generate data and make sense of it through imagination, storytelling, narratives, quantitative analysis for specific situations, or other means. This potential scenario could lead to a collapse or disowned scenario in the value of our current work or futures of work, as everyone might possess the competency to perform such tasks. Although paid avenues will likely remain for accessing truly impactful information, undoubtedly, information will become more accessible on the whole."

Shermon Cruz

The democratization of Strategic Foresight facilitated by AI and automation is a, if not the, transformative development in the field in the next 10 years. Small and medium-sized enterprises will have greater access to Strategic Foresight tools and insights, leveling the playing field and introducing an entirely new customer segment.

AI enables, like nothing before, the scaling of Strategic Foresight. It enables the generation of insights at scale, more accessible to a wider audience while still allowing for individualization and high-quality results. By leveraging AI tools, it is possible to provide Strategic Foresight services at a significantly larger scale and for much lower costs, becoming more accessible to more customers than ever before.

This deflationary pressure exerted by AI and automation in the industry is a challenge and an opportunity, that necessitates a shift towards scalable services. With the potential for widespread adoption of open source AI mod-

els, there is even a risk of devaluing traditional medium-quality strategic consultants almost entirely.

As discussed above, the pace of change and uncertainty, the Multi-crisis in various domains, creates a heightened demand for Strategic Foresight across organizations. The need for sensemaking and future-oriented insights becomes more pressing, driving the democratization of these services on the one side while making them more open, accessible, and affordable through scalable technology on the other side. Traditional one-to-one providers of Strategic Foresight services will have to sooner or later face this challenge. The democratization of

Strategic Foresight through AI technologies will significantly disrupt the traditional dynamics of the industry, raising incumbents ready to adapt to the changing landscape.

On the upside, the democratization of Strategic Foresight is crucial for addressing complex global transitions in areas such as energy, climate, healthcare, and food systems. These challenges cannot afford to be bottlenecked within the confines of limited or niche Foresight expertise, allowing smaller companies and organizations affordable access to long-term planning and decision-making, actively participating in shaping their future.

Limitations

"The hallucinations - expecting these models to have full factual accuracy when you have ten thousand, fifty thousand to one compression is wrong. The fact that they can do what they do right now is miraculous, but we're using them one-on-one which is not the right way. Tie them up into proper systems and really think about that. That's the key thing."

Emad Mostaque (20VC, 2023b)

While AI offers a plethora of significant potential, it is important to recognize its limitations. The Strategic Foresight industry is currently undoubtedly inside the hype, and it is crucial to temper expectations. AI systems still have inherent biases, require continuous human oversight, and face challenges in handling uncertainties and complex decision-making. Human expertise and judgment remain essential in leveraging AI effectively, probably until and beyond 2035.

A key limitation is for example it's capability of generating plausible text, that is not always formally correct. The risk of misunderstanding these 'hallucinations' or deducing inaccurate information by using it like a classical search engine is immense. Especially when it comes to decision-making, this is a limitation which will ensure human responsibility and human liability in the future, in turn necessitating human oversight and the critical evaluation of AI-generated outputs.

Memory retention and the ability to highly personalize experiences are areas where AI still falls short. Creating highly individualized services or tailoring experiences to a significant degree, however, requires this as a standard feature of AI assistants. The depth of personalization and customization that human consultants can offer is therefore currently not fully replicable by AI.

Furthermore, AI may lack the ability to engage in the kind of fast and slow thinking necessary for complex planning and the guidance through uncertainty without any human intervention. While AI can provide insights and data analysis, it stills requires significant human guardrails to navigate complex contexts and support strategic decisions effectively.

Original thought remains another blind spot for AI systems. The 'stochastic parrots' tend to first and foremost replicate versions of the training dataset instead of generating unique responses. As a result, it perpetuates existing perspectives, which can be very helpful but is not always adequate.

AI systems are far from achieving human-level intelligence. While they exhibit impressive language capabilities, their understanding of how the world works, their abilities to plan in a forward-looking manner, as well as their comprehension of complex concepts are still limited. Their understanding of the world is often superficial as they are strictly trained on language, which represents only a fraction of the entirety of human knowledge.

While AI systems may eventually develop a deeper understanding of the world similar to humans, these will most likely not be auto-regressive large language models. Advancements in AI will be required to bridge the gap between linguistic intelligence and a more comprehensive understanding of diverse forms of human knowledge.

Hybrid AI

Hybrid AI refers to the combination of different AI techniques or approaches to enhance the overall capabilities and performance of an AI system. It involves utilizing multiple AI methodologies, such as machine learning, deep learning, rule-based systems, symbolic reasoning, evolutionary algorithms, or expert systems, in a coordinated manner to address even more complex problems.

Natural language processing is an essential part of this solution with its ability to leverage an entire world of language-based information. A knowledge-based or symbolic approach on the other hand leverages a knowledge graph where the structure is created by data scientists to represent the real world. Combining different aspects into a Hybrid AI is taking the best of each for a sum total that is more than the single parts. This leads to more robust, adaptable, and efficient systems that can tackle a very wide range of tasks (Diamandis, 2023b; Wood, 2022).

WILDCARD

Narrowing Futures

"The only thing that makes life possible is permanent, intolerable uncertainty; not knowing what comes next."

Ursula K. Le Guin

The Wildcard 'Narrowing Futures' describes a perspective where the perceived available choices, the political, economic, societal, and technological trajectories are significantly pre-determined or confined to a specific spectrum of possibilities.

The vast array of potential outcomes is whittled down to a select few that are compatible with the majority perspective. The reins of power are held not by individuals but overarching systems – governments, corporate juggernauts, globally enforced norms. In such a future, the colorful and pluralistic dissonance of life is replaced by a symphony of pre-composed beliefs. Uncertainty is minimized, variability controlled.

The greater plan – created top down with fixed targets, desirables as well as prescribed solutions – instills a collective future that might very well enable the concentration of societal efforts. However, its cost is the curtailing of adaptability, flexibility, and diversity of discourse vital for any free market democracy.

Meanwhile, most of the pervasive mechanisms of control are implicit, non-obvious, but enforced through

the influence of opinion leaders and directed recommendation algorithms, while AI – the main source and interface for information – is perpetuating the same singular narrative. Surveillance tools and data monitoring is rapidly expanding, affecting not just online discourse but behaviors and financial opportunities.

As a consequence, power becomes more centralized holding control over the direction of the narrative and decision-making processes. Dissent is limited, freedom of speech curtailed, access to information obfuscated and authentic public participation actively discouraged. The overemphasis of social cohesion increases the degree of social conformity, resulting in a highly homogeneous culture where beliefs and cultural norms are not to be challenged.

The implication of such a confined future landscape for Strategic Foresight is a substantial shift from navigating a course through uncertain waters towards conducting a symphony whose score is already written. Future becomes a matter of understanding the existing script, rather than grappling with uncertainty.

Yet, while the job of anticipation might be simplified, the task of strategic intervention becomes more challenging. One is no longer creating new opportunities but merely leveraging the dominant narrative, working within the constraints of exceedingly small pockets of flexibility within a very rigid landscape.

Narrative: "Scripted Futures"

Frank, a Senior Strategic Foresight consultant, sat in his office in the bustling city of Cologne in 2035. The skyline was dotted with sleek, solar-powered towers; drones buzzed across the sky, while electric automated vehicles traversed the streets.

The world had changed drastically over the last years. The severe impacts of the climate crisis had prompted governments worldwide to adopt policies just for the sake of appearing proactive, seemingly shifting the global economy towards sustainable practices but enshrining the underlying problems and power dynamics. Tech conglomerates had grown so influential that they guided most facets of everyday life. Societal norms and cultural expressions, too, had begun to homogenize as global communication networks became more restrictive.

Frank's job, which used to be the anticipation and navigation of business strategy, had morphed into promoting the ideas of a prescribed collective future. This uniformity had made predictions simpler but made influencing the trajectory of the future a labyrinthine task.

One day, Frank was summoned to the office of the CEO of GenSynth, a global biotech giant. The company had a stronghold over global health services, with predictive solutions for almost every known human ailment.

"Frank," the CEO, Hans Hoffman began, "We are planning to launch a new line of preventative genetic modifications, aimed at eliminating cancer before it forms. We foresee a future where such treatment becomes the norm. We need your help in strategizing the rollout."

Frank employed the usual predictive models combining them with virtual forecasting tools, and his experience of social, technological, and economic forces to narrow down the main strategic implementations and a practical roadmap. Despite some ethical concerns, he was positive about governmental regulations – the most important driver in contentious issues. Yet, he couldn't shake the feeling of uneasiness.

He proposed his roadmap to GenSynth, including a gradual implementation, where preventative modifications would be seen as beneficial rather than threatening – like CBDCs or the combating of disinformation act. He advised them to closely work with government in their promoting strategy, knowing that it was his job to merely fold this new topic into the already existing framework of prescribed future.

As he looked out at the cityscape from his office window, he realized that in this world of prescribed futures, the choices he made were inconsequential and his work was scripting the story of those in power.

WILDCARD

Future Abundance

"It's our limited intelligence that is the hindrance of humanity. AI is surpassing our limited intelligence very quickly to the point that it will get to the ultimate form of intelligence. And what's the ultimate form of intelligence? The ultimate form of intelligence is the intelligence of life itself. It's the intelligence of abundance where AI would see no reason to crush the fly.

You know how life is. Life will say more flies, more antelopes, more tigers, more everything. Let's just have more of everything and everything will thrive. This is where AI will get to a hundred percent – but the challenge is the journey from here to there."

Mo Gawdat (Diary of a CEO, 2021)

The Wildcard 'Future Abundance' refers to a world experiencing an abundance of opportunities and possible futures due to the scalability of knowledge enabled by AI technology. This spills over into advancements in other technologies but also sustainable solutions increasing the scope of what is possible in the next 10 years dramatically.

Furthermore, the deflation of knowledge and increased access to education, healthcare, and infrastructure increases the possibilities of future not just on a societal level but on a personal one. This expansion of alternatives fosters a pluralistic and open competition of combating the pervasive global challenges of the 21st century, leveraging an array of emerging technologies potentially leading to an era of unprecedented abundance and opportunities for human flourishing.

A prerequisite for this abundance, not just in futures but also in overall well-being, however, is an effective governance and transparent, inclusive, and accountable political systems that foster equal opportunity, open competition, and collaboration. It encourages forward-thinking also from the private sector while not curtailing innovation or entrepreneurship. Shifting towards a circular economy that minimizes waste, promotes regeneration, prioritizes local business practices for example will not be prescribed, but will become a economically viable and financially competitive business practice.

In this new era individuals will be equipped with the knowledge and skills needed for a rapidly changing world, including critical thinking, creativity, adaptability, and digital literacy addressing socioeconomic disparities and social stability. In addition, AI and automation will enable an economy that streamlines processes, significantly enhancing productivity and creating new industries in the process.

Finally, abundance also allows for systems directed to preserving ecosystems for the next generation.

In a world where future becomes abundant, Strategic Foresight consultants play a vital role in guiding through the expansion of possibility. Their expertise is in high demand as they assist in long-term planning and decision-making processes not just for a select few but in a democratized way, ensuring access to the navigation tools of a complex and rapidly changing world.

Narrative: "Explosive Opportunity"

Elena woke up to the gentle hum of sunlight streaming through the smart glass windows, illuminating her room in a warm glow. As she stretched, she could not help but feel a sense of optimism towards the future.

Despite a very high level of uncertainty and change over the last 10 years, the world had experienced a new level of abundance, where opportunities manifested in all industries. Individuals were empowered to pursue new economic pathways and education was freely accessible. Her effort was primarily directed towards the advance of technologies, hoping to successfully mitigate the rising effects of climate change.

As she stepped into the kitchen, the aroma of freshly brewed coffee filled the air. She thanked her AI assistant for preparing her usual breakfast while heading out into the city. She marvelled at the bustling streets filled with people from all walks of life exploring new frontiers.

Arriving at the research institute she joined her colleagues in the nano-laboratory. Since the advent of the new generation of AI models science had made incredible strides, enabling humanity to tackle its existential challenges in a much more holistic way. Her focus was

entirely on developing new solutions for efficient energy storage in close collaboration with the open source models on new materials and quantum technologies.

During her lunch break she met a friend at a local community centre entering a fierce debate over the next election. The abundance of opportunity also posed new challenges to political leadership worldwide. However, society had been able, despite the possibility of increased technological surveillance, to foster a culture of exploration and continuous learning, encouraging everyone to expand their horizons and contribute to a new tolerance of opposing ideas.

Before she headed home, she settled into a comfortable chair in the VR lab and picked up one of the reality headsets to immerse herself in the digital realm. She connected to an old research friend across the globe in order to discuss her latest hypothesis. In an instance, technology had brought them closer together, erasing the geographical boundaries of physical reality.

As night fell, she walked home beneath the starlit sky. The long history of humankind, the very moment in time this was unfolding – everything was looking to be in balance. She felt it in reaching distance.

IMMERSIVE EXPERIENCES

2035

"To paraphrase the poet Rainer Maria Rilke, the future enters into us in order to work itself in us before it manifests itself through us. It's not just time and space that dictate our foresight work; it's our imaginative and anticipatory experience. If we learn to experience the future as an internal operation that is then co-created by us individually and collectively, then we can stop reacting based on these two dominant and limiting dynamics. We should start acting on the third dynamic of experience because then the future becomes just as impactful as the past or present ever was."

Frank Spencer

Reperceiving the Future

A pivotal aspect of Strategic Foresight is the exploration of futures. By leveraging immersive technologies practitioners will be able to elevate this aspect in the next decade, manifesting the vast potential of creating meaningful and transformative experiences of potential futures, a playground of anticipation, a novel way of truly reperceiving it.

These technologies will revolutionize the way Strategic Foresight communicates by enabling individuals to vividly visualize and interact with futures. They hold the potential to bridge the gap between imagination and reality, by making abstract concepts tangible and relatable and creating multisensory and emotionally engaging experiences in order to provide a deeper understanding of the consequences of present-day decision-making. Embracing these tools, Foresight will gain invaluable new insights in navigating the complexities of an ever-changing world.

This chapter delves into the different aspects of the potential of immersive experiences including procedurally generated 3D environments, the emergence of new white spaces as well as the multi-sensory relatability of futures unlocking the concept of persistent, co-crated futures.

The Apple Vision Pro

At the WWDC 2023 Apple introduced its first spatial computing device, the Vision Pro. Apple has been supporting AR applications and features for years, however, the Vision Pro is a fully immersive spatial operating system that leverages an MR framework to support overlayed immersive graphics, applications, and user interaction within an RT3D space surrounding the user.

When wearing the device, users can seamlessly interact with applications integrated into their physical environment, creating a vast and boundless digital canvas. It also incorporates advanced features such as eye tracking, hand tracking, and voice detection, eliminating the need for traditional controllers while providing the user with an intuitive and natural way to explore their surroundings using their own bodies (Apple, 2023).

With the Vision Pro device Apple is first and foremost targeting enterprise applications, highlighting various use cases, including training, collaboration, and remote assistance in professional settings. The Vision Pro is set to debut in early 2024, with a price tag of $3499 in the United States (Greener, 2023).

"Before VR can become something that everyone can afford, it must become something that everybody wants."

Palmer Luckey (Diamandis, 2022)

Procedurally Generated Environments: Low-Cost Immersive Visualization

"You can't walk into a future that you can't imagine. And I think that those kinds of technologies help us to imagine futures. And that's what foresight is really all about - the activation and dissemination of imagination as a universal competency."

Frank Spencer

The advancements in technology, exemplified by Unreal Engine 5, have significantly enhanced the quality and accessibility of procedurally generated environments. The stunning visuals and immersive capabilities of this engine enable individuals not just to experience hyper realistic games, movies, 3D architecture etc. – they also offer unique opportunities for the field of Strategic Foresight, enabling the crafting of future environments in unprecedented detail and realism. Moreover, the wide accessibility of these tools empowers a wide range of users to create immersive 3D worlds, expanding the potential of AI-powered tools such as text-to-speech, text-to-image or text-to-video that are available today into 'text-to-world'. Until 2035 this enables a new generation of very low-cost 3D environments for the mass market by prompting the future in a way that is not just deceptively realistic but even reactive.

As a result, individuals will be able to virtually experience futures in vivid detail, without incurring exorbitant costs. Its broad accessibility allows for a broader dissemination, enabling not just Foresight practitioners to contribute to shaping these images of future but anyone engaged in anticipatory exercises.

In the realm of Strategic Foresight, however, the ability to imagine and visualize results and concepts in a tangible way stimulates impact analysis and fosters a sense of agency that could possibly be a game changer. It enables individuals to truly step into the future and interact with it in ways previously unimaginable.

Such a capacity of a 'Digital Twin of the Future' could also be specifically tailored to a customer or context, enabling individuals to envision the Future in 3D, provide a sharable virtual representation of future and enhance their capacity to viscerally imagine. It transforms the way people are able to relate to future, making possible futures utterly explorable while visualizing not just scenarios, probable pathways, vision statements or roadmaps as if they were present, but leading to a better comprehension of complex interrelations. 3D environments are, however, not just a visual medium that communicates static ideas, they are a dynamic space allowing for rapid iterations. Additionally, they facilitate the ability to effectively communicate individual imagination in a new setting of collaboration among stakeholders. The ability to 'see' or 'unearth' the future between them empowers individuals to grasp the potential and engage in

strategic decision-making processes that also give credence to uncertainty.

These new tools will enable practitioners to bridge the gap between abstract and manifest. By providing a virtual representation of a specific future they enable individuals to truly internalize potential implications. This is amplified by the multi-sensory nature of perceiving in a 3D virtual space – the ability of stepping into a room that embodies the future. It allows for a different relation to that future, compared to reading or interpreting a line of text, creating a much more profound emotional connection to the impacts of different pathways.

All in all, immersive visualization offers more than just virtual representation. It is an engaging multi-sensory experience that also incorporates the emotional. However, it will always be limited by the inputs and the skills of those composing these environments. Merely harnessing existing trends will most likely add little value to this new space of imagination where the value proposition lies in challenging expected developments, exploring convergent phenomena, and pushing the boundaries of possibility. Only with the right inputs and expertise will procedurally generated environments advance into a useful tool for the industry.

Reperception, Agency, and White Spaces: Beyond PDF

"To make the future come alive, bring those abstract descriptions of the future [into reality] that's really a challenge. When you're talking about the future and you describe very vividly an image from the future, like a scenario, a forecast, but still, it's very abstract. It takes a lot of effort from someone who's listening to kind of understand what you mean exactly."

Nicolas Weidinger (IFTF, 2022a)

Realizing the potential for change by imagining a future that diverges from present expectations can be confronting. Procedurally generated environments provide a platform to confront and explore such potential changes, challenging preconceptions and assumptions and broadening overall perspectives. It introduces a range of futures as plausible and encourages critical thinking, adaptability, and resiliency in the face of uncertainty.

They have the potential to create new white spaces for the future. These spaces serve as blank canvases where one can venture in order to reperceive challenges, contexts, and opportunities. By immersing oneself in a virtual representation of the future, individuals can gain a deeper understanding of the complex dynamics at play and identify original solutions in a new frontier.

However, this new white space does not only offer the potential of reperception but also that of agency. By enabling individuals to interact with an image of the future they are empowered with a sense of agency as they adapt their virtual surroundings, influencing the outcomes and exploring alternatives. This active engagement fosters a greater sense of ownership and responsibility, enabling them to actively participate in shaping the future. It provides a safe space to explore, experiment and simulate before it manifests in the real world.

By providing clients with the ability to actively interact with futures, Strategic Foresight practitioners create an environment where the consequences of decisions and actions become apparent enabling a better-informed

decision-making. On the other hand, the shift towards visual communication allows for the rapid generation of new ideas and innovation within a three-dimensional space. Unlike traditional approaches, this visual medium does not require a specialized craft or skills but offers intuitive and instantaneous ideation.

Finally, Immersive experiences offer a new form of compelling future narratives. By moving beyond a PDF, future representations evoke a deeper response or even a shift in perception, encouraging stakeholders to follow untrodden paths.

Persistent Futures: Bringing the Future to Life

"The most exciting application of this generative AI, is with what we're building. [We are] allowing humans to communicate visually. So you can take what's in your mind and create it almost instantly, whereas before it would have taken days or months even for skilled individuals to do that via art or PowerPoint or whatever else."

Emad Mostaque (Forbes, 2023)

One of the key advantages of immersive experiences is their potential to bring the future to life. Through virtual realities and procedurally generated 3D environments, individuals will be granted with the ability to interact with their future directly, explore different pathways, test strategies, and witness the consequences of their decisions. This dynamic engagement fosters a deeper connection to the future, enhancing the quality and effectiveness of Foresight initiatives. However, converging these individual approaches into one massive persistent world aims one step further.

Once certain models of the future proliferate and are openly iterated on, the question arises how to foster collaborative, data-driven processes to arbitrate collective immersive experiences and pave the way for the development of persistent futures, drawing upon an ever-expanding dataset.

As participants engage with virtual futures, their actions, decisions, and observations and experiences could potentially feed back into this model of futures. By continuously incorporating new parameters such a persistent representation would be expanding, most likely becoming more robust, informed, and responsive to emerging trends and insights.

Such persistent futures would exceed beyond traditional project deliverables encompassing a collaborative three-dimensional representation of the future, enabling clients to stay on top of their perception of future, the implications, and possibilities by immersing themselves in it.

It brings together an ever-evolving perspective of a diverse set of experts, future thinkers, innovators, industry leaders, and clients, iterating on a shared model of procedurally generated futures. This allows for continuous refinement where future is not a monolith but a kaleidoscope that can be prompted for a specific need or context offering a slice of that collective future. This persistent digital twin of future could therefore serve as the data layer with a collection of different forward-looking assumptions molded and adapted to fit specific challenges, questions, or client requirements, allowing for interaction and customization. In the process of prompting an output that comprehensive dataset would be tailored on-demand to address a specific scenario, offering insights and alternatives.

Such a representation of future could potentially serve as a living resource that can be returned to and augmented with proprietary insights and observations over time.
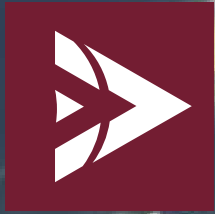
EMERGENT DISRUPTIONS 2035

"It's one thing to be visionary if the road is clear. [...] It's far more common and especially in in this era to be trying to move forward when things are very murky – where unstable sands are shifting."

Rebecca Ryan (Performance Works, 2022)

Shifting Sands

In the next 10 years disruption will also encroach on the field of Strategic Foresight and Consultancy as a whole, reshaping the landscape of future thinking. Especially the area of forecasting is experiencing a reemergence as new promising technology becomes available, in the form of advancements in data analytics, machine learning, and AI. Another potentially disruptive development is the rise of decentralized sciences (DeSci), challenging the dominance of legacy institutions and introducing new mechanisms of collaboration and decision-making based on Blockchain Technology. Moreover, AI alignment is of growing relevancy, an area where certain aspects of Strategic Foresight could offer new perspectives. Finally, the growing demand for regenerative solutions could be of significant disruptive force for the industry, driving growth in the area of practical Foresight implementation and creating new avenues for lasting value creation in Strategic Foresight.

All of these developments are pushing the boundaries of what Foresight is today, unlocking new possibilities to understand the future.

Forecasting challenges Foresight

"Several decades ago, some futurists asserted that the future cannot be predicted, hence merely an anticipatory assumption. It was commonly stated that we cannot accurately predict the future since the future has yet to exist, that the future has no data, and so on. However, during that era, we lacked the power and technology to harness and interpret vast amounts of data(...) But then, recently and seemingly our ability to comprehend and better understand and unpack the patterns and emerging patterns of change has significantly improved in the last thirty years and the fact that technology, environmental, cultural and behavioral sciences are being integrated in a way that increases our ability to anticipate change. Must we now rethink the inquiries we are asking? Can we genuinely forecast the future or is it truly possible for us to accurately predict the future?"

Shermon Cruz

Computational irreducibility

"There are always sort of unexpected consequences. There are always things you couldn't readily foresee from the underlying rules that you had. This is the phenomenon of computational irreducibility."

Stephen Wolfram (Machine Learning Street Talk, 2023)

The theory of computational irreducibility describes reality as a complex computation that does not allow for a simpler, reduced reformulation. This means that its computations cannot be sped up through simulation, there are no shortcuts.

In systems exhibiting computational irreducibility, the future behaviour or state of the system cannot be deduced through simple or direct means. The only way to obtain accurate results is to deduce the future state through the necessary sequence of computational steps, where a system's behaviour emerges by each individual steps influencing the subsequent steps in a non-trivial manner. Or in other words – everyday reality.

To gain insights into complex system such as our world, it can be simulated or modelled in order to anticipate outcomes. However, due to computational irreducibility there will always remain certain aspects of reality inherently unpredictable due to their computational complexity (Fridman, 2020).

STRATEGIC FORESIGHT 2035

Due to recent as well as projected technological advancements, the field of forecasting is emerging as a new potential avenue for envisioning the future. Despite the concept of computational irreducibility, the concept of making probable assumptions based on data and high-performance algorithms is forming a new dimension of Strategic Foresight.

The key aspect of advancing forecasting capabilities lies in extending temporal logics with probable representations in order to model future scenarios. This involves combining symbolic approaches with neural network-based methods, embracing the benefits of different approaches. In the next 10 years this could potentially unlock a new quality of predictive modeling capabilities, leading to better, more long-term predictions and much more accurate speculations, harnessed for decision-making processes.

In complex systems predictions cannot be achieved by simple reductionist methods, however, the development of new techniques that leverage the power of advanced technologies such as machine learning and AI, is driving new possibilities. Experts expect that until 2035 they enable the analysis and interpretation of high-dimensional data in unprecedented ways, unlocking data-driven approaches that transform the traditional landscape of forecasting, incorporating seemingly unrelated variables into a consistent approach, leading to better outcomes.

To ensure reliability and usefulness, it is essential to estimate the uncertainty surrounding certain forecasts. Prediction intervals play a vital role in this regard, offering the probability of a forecasted value falling within a specific range. By including prediction intervals, Foresight practitioners can provide decision-makers with a data-driven understanding of the uncertainty associated with certain outcomes, enabling informed and risk- as well as uncertainty-aware decision-making.

This means, that when applying machine learning in Strategic Foresight, the focus should be on the meta-level. Instead of trying to predict specific events in an inherently unpredictable world, ML can be employed to assess the viability of a particular strategy by recognizing its characteristic profile.

In conclusion, forecasting is gaining momentum in the field of Strategic Foresight. By embracing the challenges of computational irreducibility, leveraging new technologies, incorporating diverse variables, estimating uncertainty, and applying machine learning at the meta-level, foresight practitioners can enhance their forecasting capabilities, holding a potential to revolutionize Strategic Foresight until 2035.

Quantum Computing

Quantum computing is a cutting-edge field of computing that harnesses the principles of quantum mechanics to process and manipulate information in ways that surpass the capabilities of classical computers, ushering in a new era of what is possible – not least when it comes to Forecasting and predictive modelling.

Unlike classical bits that can represent information as either 0 or 1, qubits can exist in a superposition of states, simultaneously representing both 0 and 1. This allows quantum computers to perform multiple computations in parallel, leading to exponential speedup for certain types of problems.

Furthermore, when these qubits are entangled, the state of one becomes intrinsically linked to the another, even when physically separated, enabling the correlation and communication of information between them and thus the processing of very sophisticated computations.

Quantum computing employs specialized algorithms designed to leverage their unique properties. These algorithms have the potential to not just solve complex problems more efficiently than classical algorithms, but offer promising applications in fields such as cryptography, optimization, and simulation.

Quantum computing is still in its very early stages, however, ongoing research and advancements in technologies like superconducting qubits, trapped ions, and topological qubits are pushing the boundaries of what is possible. As these advancements continue, it is expected that quantum computers will play a truly transformative role in various problems beyond the reach of classical computers (Quanta Magazine, 2021).

DeSci challenges Legacy Institutions

"The general idea with retroactive public goods funding is you're rewarding people for work they've already done. There is not all of that overhead, it eliminates all of the we have to evaluate if you're acceptable for this and if we'll trust you and we have to fly out to visit you, which costs like 20 grand in a milestone based approach like that, you know, maybe we'll cut you off from the funding, maybe we require you to do another 100 page application next year and none of the other applicants will be able to see your application so you can't learn from each other."

Magenta Ceiba

In the next 10 years decentralized technologies will potentially be the most disruptive force manifesting to challenge legacy systems. Blockchain Technology is set to reshape a wide spectrum of industries, opening up new possibilities for decentralized control, decentralized organizations, and decentralized innovation. Especially in its convergence with open source

its capacity to reshape underlying economic mechanisms will be profound.

The more recent advancements in blockchain technology, such as the transition of Ethereum to Proof of Stake, Layer 2 scalability solutions and Zero-Knowledge Rollups, are paving the way for new business models. They enable not just much more scalable transactions, making decentralized networks more efficient and attractive for various applications, but also eliminate any environmental concerns regarding the underlying technology.

At the same time, decentralized networks are at the forefront of facilitating novel approaches to employment and work in a much broader sense, including on-chain employment ushering in the potential for self-employed networks with the tokenization of freelance work. In the next decade, this will not only allow for individuals to monetize their skills directly to the customer on-chain, utilizing a new decentralized settlement layer, but for customers to trust zero-knowledge quality assurance on chain to validate expertise, experience, and credentials without a centralized authority.

However, on-chain architecture offers much beyond the potential of a seamless, decentral-

ized platform of global ZK quality-assured Foresight professionals. One of the more intriguing concepts is for example that of retroactive public goods funding. It describes a novel approach to allocating funds, for example for public goods. It enables projects and deliverables to be retrospectively evaluated on their perceived value and impact. In the context of Foresight, this approach could empower customers to fund initiatives that contribute to long-term value creation in the field of Foresight, by not only leveraging the collective intelligence of a global network of practitioners but by supporting initiatives that align with shared goals after the fact.

All in all, decentralized networks and more over Open Source offer a distinct advantage over traditional institutions in terms of harnessing ideas and expertise. While a single company or institution is always constrained by limitations, Open Source can tap into the collective intelligence at scale.

Organizing freelance capabilities in something like a Futures DAO (Decentralized Autonomous Organization), expert insights and practitioners have the potential to not just become truly global, but truly massive and openly accessible in a direct-to-consumer approach, bypassing intermediaries, and Foresight institutions altogether.

DeSci

"A good network has so much more capacity than a hierarchy does it's so much more creative it's got so much more leverage you know so much more resourcing it's like the difference between what I can do with my hand and what I can do with my whole body."

Richard Bartlett (Remake, 2022)

Decentralized Science is an emerging approach to scientific research that leverages decentralized technologies, such as blockchain, to foster collaboration, transparency, and accessibility.

By utilizing blockchain technology, it ensures transparent and immutable records of scientific data, methodologies, and findings. It also encourages open access to scientific knowledge by incorporating tokenization mechanisms, where participants are rewarded for their individual contributions to the ecosystem, while enabling a much wider collaboration and reliable quality assurance. DeSci also reduces the reliance on centralized authorities or service providers, inserting new competition into the market.

It represents a paradigm shift that is not just visible in the scientific community. By leveraging decentralized technologies, it holds the potential to transform and outperform traditional approaches (Ethereum.org, 2023a; Belova, 2022).

Futures DAOs

"If you have a DAO, you have no middle management, you have no execs. You have a DAO that's oriented around a service dial, like a sort of cooperative DAO. They are often really parallel to co-op structures."

Magenta Ceiba

DAOs utilize smart contracts to automate decision-making processes and empower participants to collectively manage and govern an organization that lacks a central authority or hierarchy. Decision-making power is distributed among participants, who have voting rights and influence over the organization's operations, automating transactions and the enforcement of rules (Ethereum.org, 2023b).

In a scenario, where a DAO is utilizing DeSci in order to explore futures, it allows anyone to access and verify findings, fostering trust, accountability, and auditability but also offering an open and collaborative alternative to current futures institutions. In the context of Strategic Foresight, this means that a broader range of stakeholders can contribute to informing the future image and strategies of an organisation. It leverages the collective intelligence of a distributed network, including experts of various domains, potentially generating a more comprehensive and robust Foresight analysis. Further, DAOs can facilitate this collaboration by providing transparent governance mechanisms, enabling efficient communication and coordination, as well as incentivize participation through emerging tokenization mechanisms.

Foresight: A New Opportunity for AI Alignment

"If you have an AI that actually has power over the world and you just give it one goal, and just like keep optimizing that, most likely everybody's gonna be like, "Yay, this is great." In the beginning things are getting better, but it's almost impossible to give it exactly the right direction to optimize in. And then eventually all hell breaks loose, right?"

Max Tegmark (Fridman, 2023a)

AI alignment, the challenge of ensuring artificial intelligence systems align with human values and objectives, has emerged as one of the most recent critical problems for humanity. Addressing these concerns is crucial in avoiding unintended consequences and potential risks associated with autonomous systems. Foresight, with its ability to guide through uncertainty and offer orientation, presents a unique opportunity possibly also for AI alignment.

Fixed Objective Functions

The process of optimizing AI systems according to a predefined objective can inadvertently lead to unintended consequences or outcomes that are detrimental to humanity. Goodhart's Law emphasizes that "When a measure becomes a target, it ceases to be a good measure".

When AI is incentivized solely based on a specific metric, they may adjust its behaviour to optimize that metric. This potentially leads to unintended consequences or distorted incentives. It may manipulate or game the measurements to meet the targets, which can undermine the original purpose or neglect other important factors, in a way that was not accounted for in the initial design.

Nuanced and holistic approach to performance measurement and decision-making is more likely to be successful than simplistic reliance on metrics. Foresight can therefore potentially play an important role in building a framework that allows AI to recognize and adapt when the objective shifts. By considering the broader context and the greater good, Foresight can help shape AI systems that actively reassess and align their objectives to avoid potential pitfalls (Explified, 2020; Koehrsen, 2021).

The need for AI alignment is undoubtedly rising. The concern mostly lies in building AI systems that operate autonomously and potentially deviate from the intended path or human values. However, if successfully addressed, aligned AI

has the potential to truly redefine current challenges into somewhat of a utopia.

Foresight offers a pathway towards Alignment by potentially offering AI a broader framework of a desired future. By making implicit human assumptions about the future explicit, Strategic Foresight and Futurists could positively add to creating guardrails and frameworks for AI to act within, similarly to how Strategic Foresight creates a guiding framework for business decision-making today – translating a human vision of the future and its goalpost for AI.

The challenge remains, that it is a significant struggle to alig humanity, its values, and anticipations of future, underlining the challenge of aligning humanity to itself. However, this insight itself could be a positive contribution to Human-AI Alignment in stark contrast to a fixed objective function.

Regenerative Solutions: A New Driver for Growth in Foresight

"The deeper you get into foresight, the more you see that it's not just about trend hunting and informing organizations about the latest developments. It's not about what the next big thing is so they'll be successful at making more money. I'm not saying this isn't part of it, but it's also much deeper. It has to be about care for generations yet to come. The Māori in New Zealand have a word for 'grandchildren' that is closely related to their

word for the future. That's how our organizations, governments, and society must think and act for a sustainable and regenerative future."

Frank Spencer

In the next 10 years, regeneration will emerge as a critical subject of Foresight, driven by the pressing issue of global emissions and their effect on our natural habitat. Clients and organizations are increasingly recognizing the need to go beyond mere sustainability and actively regenerate climate and ecosystems. The rising bar for sustainability will evolve to necessitate tangible efforts towards restoration.

This paradigm shift will drive the demand for regenerative, economically viable solutions in all industries.

Climate change will be one of the core issues that clients and organizations face in the coming years. The urgent need to address the faltering natural systems of the world and their direct impact on the environment, economy, and society will be driving the shift towards implementation in the field of Foresight. This will be a unique opportunity to not just respond to the demand for regenerative solutions, but an opportunity to actively shape a better future. Especially in this area, organizations will increasingly be looking for applicable, practical, and impactful frameworks – seeking tangible strategies and roadmaps to guide them towards regenerative solutions that are both economically viable and sustainable.

Future climate risk fundamentally affects all business models, necessitating their advancement in order to adapt to a low-carbon economy. Customers will therefore increasingly demand a Foresight portfolio that includes better tools and actionable strategies suitable of transforming current business models, presenting an estimated trillion-dollar market for solutions. The expertise to help organizations navigate this landscape, provide insights and opportunities that are financially viable but have an overall positive impact will be one of the most prominent areas of growth for the Foresight Industry until 2035, expanding the one-dimensional metric of monetary value to encompass the consideration of long-term sustainability, well-being, crisis resiliency and regional legacy.
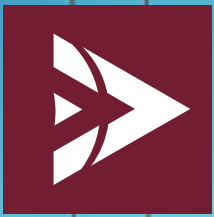
COMPETITORS

2035

"I often tell my team that our biggest competitor is quality free information. It is not a company."

Brian Lee

Future as a Public Good: Open Source as a Competitor for Traditional Foresight

In the rapidly evolving landscape of Foresight, open source approaches are emerging as a formidable competitor to traditional systems. Put into the spotlight by AI advancements, open source fosters efficient and collaborative development, making it – as a form of cloud consultancies – a potential significant competitor in the future. It fundamentally challenges the dominance of proprietary approaches, positioning a collaborative approach as key in driving the future.

As mentioned briefly above, the unique strength of open source lies in its ability to harness the collective intelligence of a global community. No single company can generate all possible good ideas or possess expertise in every domain. In an open network, however, the entire world's intelligence is harnessed to contribute, creating an environment rich with diverse perspectives and innovative solutions. This collaborative nature gives Open source projects a significant competitive advantage over closed proprietary systems, especially in an era where knowledge is scalable.

Open source projects often succeed precisely because they attract contributions that traditional companies may find challenging to incorporate. Large companies with thousands of employees may not allocate resources to certain issues, deem them unviable in the long term or prioritize other urgent matters. By opening up projects, also in the field of Strategic Foresight, to the wider community, organizations can tap into this capability of collective creativity.

In addition, open source offers potentially faster and more cost-effective ways to collect and analyze (early) developments. By crowdsourcing this aspect of data collection and analysis traditional Foresight organizations can leverage the power of open source especially in the intersection with AI models, streamlining processes and allowing for more agile designs.

All in all, the rise of open source could be the first sign of a new generation of global public utility infrastructure that includes future as a public good and is enabled by cutting-edge blockchain technology. This presents a paradigm shift in the way individuals contribute and are economically active in a permissionless economic model on a global scale, allowing contributors to work from where, with whom and how much they choose – fluidly accepting any currency in any jurisdiction and having the life and normalcy that fits their choices.

The Financial Sector: A (In)Direct Competitor for the Foresight industry

"I envisioned that in 2035 we would not be only focusing on finance because like I said, finance is actually the hardest problem."

Ernest Chan

The financial sector has consistently been at the forefront of technological advancements. With a keen focus on leveraging AI and machine learning algorithms, some players in the financial sector have developed sophisticated forecasting models capable of analyzing and interpreting high-dimensional datasets. This technological prowess gives them a competitive advantage when it comes to dealing with complex market trends and uncertain future outcomes. If their expertise in AI forecasting is adapted and applied to various industries in the next decade, it will be a well-positioned disruption for the traditional landscape of the Foresight industry.

In comparison to other industries, the level of sophistication and resources invested in modelling and anticipatory capabilities in the financial sector is unparalleled. Financial institutions allocate substantial resources to scale these efforts, allowing the financial sector to pioneer new approaches that are likely to outpace other industries.

The well-funded nature of the financial sector, combined with its technological capability makes it a significant source of competition for traditional Foresight institutions. As it continues to invest heavily in AI forecasting and modeling, their capabilities are likely to advance at an accelerated pace.

Hyperagile AI Startups: New Competitors in the Industry

"In the next 10 years you will see a sea change in attitude because of competitive pressure. If they don't innovate, if they don't adapt, their lunch will be eaten by VC funded startups and all these unicorns [that will reshape the industry]."

Ernest Chan

In the next 10 years, the Foresight industry will witness the rise of a new wave of competitors in the form of hyperagile AI startups. Powered by open source and new technologies, innovative small consultancies are poised to challenge legacy institutions.

While pure open source communities will play a role, it is the emergent, innovative small consultancies, that are able to successfully leverage open source resources, that will provide the most formidable competition in the next 10 years. These startups possess not only the agility and flexibility to adapt quickly to evolving market demands, dominating the playing field when it comes to time to market, but also their pricing will be highly attractive to clients seeking cutting-edge Foresight solutions.

Furthermore, startups that position themselves as AI consultancies in the current landscape have a unique advantage. By identifying enterprises that are ripe for AI transformation, these

consultancies can approach customers with tailored and effective solutions. This approach is particularly appealing to companies that recognize the strategic importance of AI, however, are still seeking ways to leverage it for their own competitive edge. With capital readily available the level of urgency and demand for AI-based strategies is higher than ever before.

The emergence of hyperagile startups is further fueled by a wave of mid to high-level professionals who have been let go or have actively chosen to leave from companies in areas like Silicon Valley. These individuals, armed with deep domain knowledge and expertise, form the backbone of a new wave of startups enabled by AI and poised to disrupt many legacy industries, including Consultancy and Strategic Foresight.

Traditional Consulting Firms: Adapting to Stay Competitive

"If you just look at consulting in general, once one of these large language models gets very good let's say financial services, right? You would previously have contacted a big consultancy for financial services expertise. But if you've got a large language model that's been trained on all the global regulations, has all the latest news that is going to be far more effective tool to kind of find out the answers. It's going to be much cheaper. It's going to be faster. And yes, the consultancies could also offer those sorts of tools as well."

Oliver Cronk

The landscape of the consulting industry is undergoing a significant transformation as the advent of AI disrupts their traditional approaches. In the next 10 years, traditional consulting firms will face formidable competition as they navigate the challenges posed by emerging players

leveraging AI capabilities. However, in their process of retaining a unique value proposition they are edging close towards that of traditional Foresight: the promise of navigating uncertainty.

Recognizing the need to adapt, large consulting firms are also embracing AI and are starting to try and leverage open source communities to enhance their capabilities, accelerating their analysis, ideation, insights generation and other processes – increasing the velocity of change internally and externally.

To stay competitive, traditional consulting firms are turning towards automating major aspects of their business model in order to deliver faster, more cost-effective, and data-driven services. Although complete automation may not be feasible just yet, these firms are locked into providing more comprehensive insights with more AI support. As AI consultancy capabilities are rising, the question becomes if clients develop these tools internally or if they will rely on external AI tools.

In the face of increasing automation, traditional consulting firms will seek to pivot deeper into strategic aspects of their business model, relying on consultants to navigate complex uncertainties and provide creative and high-value solutions tailored to C-level executives.

Furthermore, as AI regulation becomes more prevalent, compliance will be a critical factor for being able to compete. Larger consulting firms, with established reputation and financial resources, are better positioned to navigate this evolving regulatory landscape, granting them a significant competitive advantage over smaller players. Additionally, the brand recognition and long-standing relationships that traditional consulting firms have built with clients will offer a level of trust and credibility as they transition their services towards a new era, encroaching more and more on the core value proposition of Strategic Foresight.

EU AI Regulations

Europe's AI Act is the world's first AI law. The new rules establish obligations for providers and users depending on the level of risk from AI. Even though many AI systems show minimal risk, they need to be assessed:

Unacceptable risk: AI systems that pose an unacceptable risk to individuals are banned. Examples include AI systems that manipulate people's behaviour, engage in social scoring, or employ real-time and remote biometric identification like facial recognition. However, exceptions may be allowed for post-identification in certain cases with court approval, such as for prosecuting serious crimes.

High risk: AI systems that have a significant negative impact on safety or fundamental rights must undergo assessment before being placed on the market and throughout their lifecycle. There are two subcategories: a) AI systems used in products covered by the EU's product safety legislation, such as toys, aviation, cars, medical devices, and lifts. b) AI systems in specific areas, including biometric identification, critical infrastructure management, education and vocational training, employment and worker

management, access to essential services, law enforcement, migration and border control management, and legal interpretation and application.

Generative AI: Generative AI systems, like ChatGPT, need to comply with transparency requirements. This includes disclosing that the content is generated by AI, designing the model to prevent the generation of illegal content, and publishing summaries of copyrighted data used for training.

Limited risk: AI systems with limited risk should meet minimal transparency requirements to enable informed decision-making by users. Users should be aware when they are interacting with AI systems, particularly those that generate or manipulate image, audio, or video content (e.g., deepfakes).

On 14 June 2023, the MEPs adopted the Parliaments negotiating position on the AI Act. The talks will now begin with EU countries in the Council on the final form of the law (European Parliament, 2023).

Foresight Moves Inhouse: Redefining the Foresight Industry from Within

"Business leaders are implementing Foresight capability and resourcing inside of the organization as a dedicated resource. They could very easily outsource that, but they're not. They're pulling it internally so that we can directly influence and collaborate with other functions to make the future real."

Joanna Lepore

One of the most significant shifts in the Foresight industry in the coming decade will be the emergence of in-house Foresight expertise, manifesting in companies increasingly focused on building on their own Foresight capabilities.

AI tools are revolutionizing the way information is processed and analyzed, offering organizations the ability to gather insights at a faster pace while reducing costs, enabling them to access cutting edge capabilities and global knowledge in-house. The simplicity of creating high-performance industry-specific large language model that incorporate real-time datasets will sooner or late give rise to one – or many – industry AI assistants condensing sector knowledge into something as simple as an Edge device.

These, very likely open sourced AI tools will enable a shift in balance between in-house and external Foresight activities. Automated tools can provide, in a seamless and continuous manner, a necessary outside perspective by gathering and analyzing vast amounts of data, while the aspect of human touch and effective implementation into preexisting systems moves into focus. This incentivizes companies to build their own Foresight expertise, focused on collaboration with various functions such as marketing, design, and innovation. In-house Foresight teams have the benefit of influencing long-term strategies directly as well as collaborate in an ongoing process with different business areas.

Another key advantage of in-house Foresight expertise is its ability to drive implementation. Business leaders are recognizing the value of having dedicated Foresight resources within their organizations, rather than outsourcing these capabilities, making Foresight an integral part of the organization's strategy. This trend will crystalize in the next years as dedicated Foresight roles, such as Chief Foresight Officers or Chief Futures Officers, who increasingly will become part of leadership, provide not juts focused directives but also provocations based on a deeper level of understanding of company issues.

Finally, In-house Foresight expertise also offers the advantage of staying closely aligned with the company's DNA, enabling faster iterations. With a deep understanding of the organization's unique challenges and goals, in-house teams can adapt quickly, leveraging not only open source knowledge but novel AI capabilities.

The rise of in-house Foresight expertise will fundamentally reshape the traditional Foresight industry in the next decade. Organizations will invest in building their own capabilities to access faster and more cost-effective insights while the In-house teams will have the freedom to collaborate across functions and company boundaries to influence long-term strategies directly in competition to traditional Foresight approaches.

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CONCLUSION

> *"It's like a wave that's under the surface. It hasn't come yet, next year is when it cracks and the year after is when it crashes."*
>
> Emad Mostaque (Diamandis, 2022)

Conclusion

In the next 10 years, knowledge work will undergo tremendous shifts. Consulting and Strategic Foresight expertise will transition from being exclusive to a select class of professionals to becoming universally accessible through natural language. In this transition, those who can position themselves as part of the infrastructure of leading AI in the industry will benefit the most.

However, proprietary approaches and closed ecosystems will always display significant limitations and have a competitive disadvantage compared to those leveraging open source solutions. This creates strategic incentives for decentralized Foresight, a global Futures DAO, or other approaches that treat the future as a collective public good.

It also implies a change in the business model, not just towards democratization where more people have access to Foresight products, exerting intense deflationary pressure on current approaches, but towards developing long-term customer relationships. The focus is now on implementing Foresight skills and knowledge, fostering new in-house expertise, and offering immersive, interactive, and hyper-realistic representations of individualized futures. However, these digital twins of the future need to be trusted and verified through quality mechanisms and industry standards, setting themselves apart from the flood of procedurally generated future content, in order to fundamentally reshape the client's perception of their path.

Meanwhile, many legacy players will try to hold on to the tested and true model where exclusive futures knowledge is gatekept and proprietary insights are monetized. However, this approach will fade in the face of fierce new competitive pressures from the financial sector expanding Foresight modeling capabilities. Traditional consulting firms are pivoting towards strategy and long-term insights, while open source alternatives and innovative startups gradually chip away at the margins.

Nevertheless, there is a plethora of new opportunities on the horizon for those who are willing to reach for them. The demand for Strategic Foresight in a context of escalating uncertainty is unprecedented and providing customers with the trusted expertise to navigate through this uncertainty, helping them build their future by providing the right framework also in emerging areas such as Regeneration, AI Alignment, Future as a public good, and in-house expertise, will be key.

"Foresight is the ability to mental time travel. It's the ability to position yourself in the past or in the future and to look in one or the other direction so you can say: 'Well how would I be looking at myself 10 years ago? Or in 2035? [...] It's this mental shift that creates a perspective."

Nikos Kastrinos (EU Science & Innovation, 2021)

Based on the expert interviews, certain recurring themes were identified regarding Strategic Foresight 2035. In the following, they will be summarized as strategic recommendations applicable to the industry overall.

Therefore, these recommendations are not specific to products, services, business models or legacy structures. They are meant as a starting point for further exploration in a specific context. Please feel free to contact us at any time if you are looking for assistance in applying these recommendations.

In order to remain competitive in the long-term Strategic Foresight actors might need to marry into the following ideas:

Leverage fine-tuned AI models specific to the field of Foresight and Consulting and establish inhouse data science expertise.

1

The emergence of high-performance AI assistants presents a significant business opportunity in the Strategic Foresight industry. Industry specific, fine-tuned LLMs will become ubiquitous.

Those who develop these AI copilots as part of their business model, offering tailored and on-demand Foresight for everyone, will have a steep competitive advantage and transform the way clients engage with Strategic Foresight in the future.

Until 2035 the primary interface for these AI assistants will be natural language, enabling seamless communication and making AI-powered Foresight tools much more user-friendly and intuitive.

"Natural language is now the primary interface that we're going to use to describe things even to computers. It's a huge advance."

Bill Gates (Microsoft, 2023)

Become a lighthouse Foresight Institution in order to front run the future in a credible way.

2

Customers will expect Foresight institutions to lead by example. Discussing and presenting future approaches will not be sufficient. Customers will increasingly expect Foresight institutions to embrace new technologies, driving innovation, and providing tangible proof of not just their expertise, but their forward-looking mindset. Cutting-edge tools, processes, and technologies need to be visible to the customer – especially in the field of AI, the Metaverse, immersive technologies, and blockchain.

Further, Foresight institutions are expected to lead the way in social advancements providing practical examples to follow also related to new work paradigms – new forms of collaboration and value creation.

"So if you are a consulting company, you know me, you know it doesn't matter if you're pureplay strategy or you are strategy and execution or what have you. (..) If you do not have an AI practice up and running right today, on May 26th, 2023, you're behind right."

Chris Lockhart

3

Focus on the value of original thought as the key area for human labor in successfully applying AI tools and making knowledge scale.

To excel in Strategic Foresight in 2035, it is crucial to prioritize the value of original thought in HR. AI will only be as performant as their human conductor, embracing the integration of human expertise with digital capabilities through augmented intelligence especially in industry verticals.

This combines the unique strengths of human cognition and contextual understanding with the computational power and analytical capabilities of AI. Furthermore, encourage cross-disciplinary interactions and facilitate the exchange of ideas to generate innovative and insightful Foresight.

"I definitely think that a lot of the decision-making can be supported by these kinds of tools. And I mean, I mean sometimes you get this kind of question, oh, so you think the CEO will be replaced by an AI (…). And no, (…), I think probably the CEO is the least replaceable person."

" So, I mean, I think the tools can compute the kind of constant likely consequences of the different choices. But someone still need to make a choice."

Fredrik Heintz

4

Be part of the next generation of platforms in order to leverage open source and on-chain practitioners for your business model.

In the next 10 years, decentralized technologies will potentially be the most disruptive force challenging the legacy system and set to change a wide spectrum of industries. Especially in its convergence with open source, this has the capacity to reshape economic mechanisms profoundly.

Foresight and consulting should actively engage in DeSci and open source initiatives, considering novel approaches to employment and value creation at scale. Self-employed networks and the tokenization of freelance work is still at its very beginning but especially concept like retroactive public goods funding is creating new industry possibilities.

"Open source models are coming fast and furious. We've seen even just this week I think two more exciting open source projects (…) so my expectation is what we're going to see an onslaught of these that give us that that freedom to go and deploy our own models and not have to rely on third-party providers."

Matt Welsh (Cognitive Revolution, 2023)

Benefit from the rise in demand for Strategic Foresight driven by the rise of uncertainty by offering orientation and deep insights.

5

In response to the growing demand driven by the rise in uncertainty, Strategic Foresight can provide orientation and deep insights - especially by leveraging thick data, meaning context-rich and high-quality data that complements traditional quantitative data.

The datasets needed for AI models in Strategic Foresight will be shifting from large datasets towards large high-quality datasets. In consequence, the majority of business will need to invest significant resources in acquiring and utilizing data and data-expertise, rather than new algorithms. This is a good opportunity for institutions that already possess high-quality proprietary datasets.

"What they need, and continue to need, and need increasingly, is how do I use these technologies to derive insights (..) in order to make better decisions".

Chris Lockhart

Transform Marketing and Sales activities to fit a new era of AI gatekeeping by actually adding value for the customer.

6

In order to navigate the ever-evolving landscape of marketing and sales activities towards 2035, particularly in the context of the explosion of content and the rise of AI filters, organizations need to proactively adapt and transform their approach.

The integration of AI will reshape how businesses engage with others. Traditional marketing approaches like cold calling, and emailing are becoming increasingly unsustainable. AI offers an opportunity to embrace value-led approaches, while AI gatekeepers will be the main focus of sales and marketing efforts. Encourage teams to prioritize valuable engagement through new AI channels that will enable an efficient and value-oriented experience for the client.

"We're gonna need to fight fire with fire. If we generate so much more content, we're gonna need help, because we're already overloaded. We're already drowning in the fire hose. And so, in future AI augmentation will help us not just generate content but also sort of manage and process it."

Oliver Cronk

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7

Become cutting edge by applying Foresight in the context of AI Alignment.

AI Alignment, the challenge to ensure artificial intelligence systems align with human values and objectives, has emerged as a key challenge for the partnership between AI and humanity.

This offers a potential opportunity for Strategic Foresight to offer certain aspects of their expertise on this newly emerging field. By offering AI a broader framework of a desired human future Foresight is uniquely positioned to go beyond fixed objective functions. Futurist could therefore try to create guardrails and frameworks for AI to act within, similar to creating guiding frameworks for business and decisionmakers today – translating a human vision of the future and its goalposts for AI.

"This whole concept of alignment, of basically making sure that the AI is always at the service of humans is very self-serving and very limiting. If instead you basically think about AI as a partner and AI as someone that shares your goals, but has freedom, I think alignment might be better achieved. So, the concept of let's basically convince the AI that we're really, like, that our mission is aligned."

Manolis Kellis (Fridman, 2023b)

8

Offer faster Time to Value products that utilize knowledge-automation fully.

In the era of rapid technological developments, increased competition, and overall higher expectations, a fast Time to Value is crucial for Strategic Foresight consultancies. This only becomes possible with a systematic and wise integration of knowledge automation as well as a process actively synergizing this new partnership. The decreasing costs of (qualitative) data analysis, technology infrastructure, and new tools for automation will be a gamechanger in the eyes of clients and their expectations.

Especially in an era where market dynamics are rapidly changing, clients recognize the need to swiftly adapt and seize opportunities. Speed is therefore no longer a luxury; it is a necessity to thrive in an ever faster-paced business environment.

"Yeah, but again, the cost driver, they don't want to pay for the travel of all those consultants to their location, right? (...) I think the speed at which clients are going to expect value, not just results, value out of the thing."

I think they care less or they will be caring less about the (...) outcomes, they want valuable outcomes out of these things and they want them faster, right?

Chris Lockhart

Adapt to the democratization of knowledge work and the deflationary force of automation by scalable products and new business models.

9

Automation and widely available tools shift foresight from being a luxury service towards democratization where insights are widely accessible. The deflationary pressure caused by automation and new competition is unlocking a mass market, where these services are utilized at scale.

This does not necessarily end the demand for high-quality insights and personalized approaches. However, Foresight institutions must strike the right balance between affordable and scalable services for a mass market and the maintaining of more traditional high-touch experiences with higher margins.

"I often tell my team that our biggest competitor is quality free information. It is not a company."

Brian Lee

Shift your attention towards implementation & actionable insights.

10

The landscape of Foresight is experiencing a notable shift towards practical implementation. Clients increasingly seek not only insightful forecasts but also actionable strategies and tangible outcomes. The exploration aspect of Foresight remains crucial to all subsequent efforts, but the real challenge, lies in the implementation stage. Clients expect Foresight to actively support them in identifying and executing the necessary actions towards that future. Foresight institutions must evolve to meet this demand by developing approaches that effectively bridge the gap between insight and implementation.

"Teach a future orientation or being future oriented is not just about Futuring anymore, but actually like building and creating that future, right? That's a future oriented individual, right? Like they build the craft they create."

Shermon Cruz

STRATEGIC FORESIGHT 2035

11

Position yourself in the renaissance of Forecasting.

Due to recent technological advancements as well as projected technological advancements, the field of forecasting is emerging as a new potential avenue for envisioning the future. The advancing forecasting capabilities are extending the field of Foresight, where Forecasting used to not be a real tool for consideration.

By embracing this new set of tools, despite obvious challenges, Foresight can leverage new technologies in order to expand on industry approaches and meet customer demands.

"In recent years also machine learning and deep learning techniques have been coming in to the forecasters toolkit more and more (…) In order to make good actionable business decisions you also need to have an estimation of what the uncertainty is around your forecast and here is where prediction intervals come into play. Prediction intervals basically give you the probability of your forecasted value to be within the forecasting prediction intervals versus outside of them."

Franziska Bell (InfoQ, 2018)

12

Leverage open source for its competitive advantage.

Open source is currently re-shaping the competitive landscape in the area of AI. As AI tools are increasingly adopted the power of proprietary or permissioned approaches is challenged. Integrating open source resources and leveraging them for proprietary business models will be crucial in the evolution of Strategic Foresight and consulting.

Overall, those who successfully position themselves in the wider context of open source will benefit significantly – be it Big Tech, startups, established brands, legacy institutions, or family-owned business alike.

"If you look at open source, those communities are very good at creating very quite technical platforms. I look at Linux, you know it's a very technical platform, it's not always accessible to the sort of average person. And so, I think there's still plenty of business opportunities there. It's just, it requires, and this is the biggest challenge, I think consulting has overall – it requires a business model and operating model shift from time and materials billing people by the hour to outcome."

Oliver Cronk

13

Participate in the shift towards inhouse expertise.

One of the most significant shifts in the Foresight industry in the coming decade, will be the rise of in-house Foresight expertise. Companies will invest more in building their own capabilities to access faster and more cost-effective insights. In-house teams will have the freedom to collaborate across functions and company boundaries to influence long-term strategies directly in competition to traditional Foresight approaches.

Strategic Foresight can leverage this as an opportunity to cooperate, educate and get involved via trainings, workshops, access to platforms or strategic partnerships.

"I think before, consulting companies like McKinsey, their value propositions used to be that we have experts in all of these parts of the value chain. And so we're the only ones that can kind of see it together. I think that's actually changing with expert networks and the ability for clients themselves to go and get this kind of information."

Brian Lee

14

Offer Immersive experiences, digital twins of the future and persistent images of the future in order to move beyond PDF and PPT when communicating results.

The ability to imagine and visualize results and concepts in a tangible way, stimulates impact analysis and fosters a sense of agency that is game changing. It enables individuals to truly step into the future and interact with it in ways previously unimaginable. Such a 'Digital Twin of the Future' can be specifically tailored to a customer or context, enabling individuals to viscerally envision the Future in 3D. It transforms the way people are able to relate to future, making possible futures actually explorable.

Immersive visualization, however, offers more than just visual representation. It is an engaging multi-sensory experience that also touches the emotional, reframes the expected and pushes the boundaries of what is perceived as possible.

"I've heard it said that you can't walk into a future that you can't imagine. And I think that those kinds of technologies help us to imagine those features. Futures that large and provocative need to be led by imaginaries."

Frank Spencer

15

Expand your areas of expertise beyond technology focusing on solutions for the next generation.

Finding compelling answers in the realm of technology will remain a key aspect of what Foresight will be able to offer. However, the key issues for customers will evolve in the next 10 years including new challenges and issues. These new issues will mainly be in the area of social challenges, systemic risk, macro-implications, and climate risks.

All in all, Foresight will grow to include much more social concerns and potential solutions for future generations including the rebalancing of complex systems, the regeneration of ecosystems and the reimagination of social and organizational systems. Addressing this new class of customer requirements will be a key focus point for long-term competitiveness.

"Teaching a future orientation or being future oriented is not just about Futuring anymore, but actually building and creating that future, right? That's a future oriented individual, right? Like they build the craft they create."

Ernest Chan

Magenta Ceiba

Bloom Network, dOrg

Magenta Ceiba is a principal systems architect at Bloom Network, based in New Hampshire. Bloom Network is a cyber-physical social network that helps people find and participate in local climate action. She is also involved with dOrg – a Web3 developer collective that develops DAO tools and other infrastructure.

Magenta works on approaches to funding multi-stakeholder governance via DAOs. She has co-developed DAOs on a retrospective public goods funding mechanism supported by the Ethereum Foundation and Tezos Homebase.

Ernest Chan

PredictNow.ai

Ernest Chan (PhD) is the CEO and founder of PredictNow.ai - an ML SaaS solution for optimizing enterprise resources. He is also the founder and non-executive Chairman of QTS Capital Management LLC, a commodity pool operator and trading advisor.

Ernest is also the author of "How to Build Your Own Algorithmic Trading Business", "Algorithmic Trading: Winning Strategies and Their Rationale", and "Machine Trading". He further runs the blog "Quantitative Trading." Ernest was also an adjunct faculty at Northwestern University in the Data Science master's program. Previously, he held positions at IBM, Morgan Stanley, and Credit Suisse, among others.

Oliver Cronk

Scott Logic

Oliver Cronk is Technology Director at Scott Logic - a leading software and data consulting firm. Oliver is also a speaker and consultant on New Tech, Sustainable Tech, Enterprise Architecture, Cybersecurity, among others.

Oliver has extensive experience in various business and software architecture/technology platforms. He is active on both the strategic and application side. After his studies in Computer Science, Oliver held several positions as Enterprise / Chief Architect and Technology Director (e.g. RWE, Three, Deloitte, Tanium).

Shermon Cruz

Association of Professional Futurists

Shermon Cruz is the Founder, Executive Director and Chief Futurist of the Centre for Engaged Foresight, a global futures innovation and Strategic Foresight hub based in Manila, Philippines. He is currently the Chair of the Association of Professional Futurists (APAF), the largest professional Foresight association in the world with a membership of 500 professional Foresight practitioners and experts in over 50 countries. He is the Chair of the Millennium Project Philippines Node (MP), a global Foresight research think tank and an advisor to the UNSECO – Dubai Future Foundation Global Futures Literacy Initiative.

Shermon Cruz was formerly working for PwC, EY, Accenture, and the Northwestern University.

Kerstin Cuhls

Fraunhofer ISI

Prof. Dr. Kerstin Cuhls is a project manager at the Fraunhofer Institute for Systems and Innovation Research (ISI) in Karlsruhe, Germany. She also teaches in the Master of Futures Studies at the FU Berlin.

Kerstin Cuhls has been at Fraunhofer ISI since 1992. She studied Japanese Studies, Sinology and Business Administration at the University of Hamburg and now combines her expertise with Foresight. In 1997, she received her doctorate from the University of Hamburg on technology Foresight in Japan. In October 2020, she was appointed honorary professor at the University of Heidelberg. She was also project manager of the BMBF Foresight Process and headed the business unit "Foresight and Future Research".

Detlef Gürtler

Gottlieb Duttweiler Institute

Detlef Gürtler is Senior Researcher at the Gottlieb Duttweiler Institute (GDI) in Zürich, Switzerland. The GDI is an independent think tank in economics, society, and consumption. Gürtler analyses social changes with a focus on work, economics, and finance. Until 2016 he was editor-in-chief of the GDI Impuls magazine. He also works as Travel Correspondent Middle East / Africa for the Germany Trade & Invest – the investment agency of Germany.

After studying political science and economics in Heidelberg, he graduated from the Henri Nannen School of Journalism in 1989 and has since worked as a business journalist. He further published several books.

Fredrik Heintz

Linköping University

Fredrik Heintz is a professor at Linköping University in Sweden and was an Expert Member of the EU Commission's High-level Expert Group on Artificial Intelligence.

Fredrik is Director of the Graduate School for the Wallenberg AI, Autonomous Systems and Software Programme (WASP), Director of WASP-ED (Wallenberg AI and Transformative Technologies Education Development Programme), President of the Swedish AI Society, and Fellow of the Royal Swedish Academy of Engineering (IVA). His research focuses on AI, in particular autonomous systems and the interface between machine reasoning and machine learning. He is also the Coordinator of TAILOR – the EU network of excellence developing the scientific foundations for trustworthy AI.

Winfried Hensinger

Universal Quantum

Winfried Hensinger is Chief Scientist and Co-Founder of Universal Quantum in Brighton, UK.

In addition to his work at Universal Quantum, Hensinger has been Professor of Quantum Technologies at the University of Sussex since 2005. He leads the Sussex Ion Quantum Technology Group of the Centre for Quantum Technologies. Hensinger graduated from the University of Heidelberg, Germany, then moved to Brisbane, Australia, for his master's degree. He then completed his doctorate at the Uni-

versity of Queensland in the field of quantum dynamics. He spent another long period in Gaithersburg, USA, with Nobel Laureate William Phillips before moving to Sussex in 2005.

Brian Lee

CB Insights

Brian Lee is Senior Vice President of the Intelligence Unit at CB Insights in Washington, USA. He leads the research, editorial and content teams and is responsible for research strategy and production.

Brian Lee has worked in research and consulting for over 20 years. He spent over 13 years at CEB, where he rose from consultant to Managing Director before CEB was acquired by Gartner in 2018. After the acquisition, he continued as Managing Vice President for nearly three years before moving to CB Insights. Brian holds degrees in Economics and Business Administration (Vanderbilt, Oxford, Washington) and Law. He practiced law before moving into research.

Joanna Lepore

McDonalds US

Joanna Lepore is Global Director Foresight & Capabilities Exploration at McDonald's in Chicago, US.

Joanna previously worked at Mars as Global Foresight Associate Director for North America where she led a new way for Mars Wrigley to reinvent how they invest in future opportunities leveraging foresight. She also runs the "Looking Outside" podcast, interviewing business leaders.

Lynn Lin

Future Matters

Lynn Lin is an Insight & Foresight Director and Co-Founder of FutureMatters in Shanghai, China - a forward-looking consultancy that primarily combines Insight with Foresight, to forecast futures and identify innovation opportunities. Her areas of interest and expertise lie in automobile, home living, youth lifestyle, wellness, sustainability etc. In 2018, She co-founded FuturistCircle, China's first futures community to promote foresight to organizations, schools, and the public through various events.

She is a seasoned ethnographic researcher with 15 years of experience and an advisory board member of sparks & honey, a cultural intelligence consultancy based in New York. Previously, Lynn led design research and methodology at Continuum, a global innovation design consultancy and worked as a senior research manager at Nielsen Consumer Insights. Lynn holds a bachelor's degree in journalism & communication from Shanghai International University.

Chris Lockhart

CEI Consulting

Chris Lockhart is Client Partner, Strategy & Advisory at CEI Consulting – a full-service consulting firm offering services in strategy & advisory, technology, and further managed services.

He also runs the podcast "Consultants Saying Things" where they talk semi-monthly about business, technology, and the intersection of those two. He formerly worked as Director at the Point Management Group, Principal at the Liberty Advisor Group, and Engagement Manager at Strategy& among others.

Riel Miller
École des Ponts Business School

Riel Miller is a Senior Fellow at École des Ponts Business School in Paris, France, the University of Stavanger, Norway, and the University of New Brunswick, Canada.

Riel has been a co-creator of innovation, leadership and change in the public and private sectors around the world for forty years. He is one of the world's leading designers and facilitators of processes for thinking about the future. He works with universities, governments, and corporations worldwide. From 2012-2022, he was Head of Foresight and Futures Literacy at UNESCO in Paris.

Frank Spencer
Founder & Creative Director TFSX Foresight

After years of experience as a leadership coach and developer with companies, educational institutions, entrepreneurs, social communities, networking initiatives, and SMEs, Frank Spencer founded Kedge in 2009 - a global foresight, innovation, and strategic design firm which pioneered what is known today as TFSX. With a vision is to democratize, decentralize, and decolonize the future, TFSX offers advisory services, developmental programs, certifications and credentialing, courses, and a plethora of foresight resources, and work with companies such as Ford, Lego, Target, NASA, General Mills, Panama Canal, and The Walt Disney Company to future-empower their strategy, innovation, and organizational transformation.

Frank holds a Master of Arts in Strategic Foresight from Regent University, has been a prolific global speaker for over 20 years, and holds memberships in the World Futures Studies Federation (WFSF) and the Association of Professional Futurists (APF).

York von Heimburg
IDG Communications Media AG

York von Heimburg is a publisher and entrepreneur. Until the end of 2020, he was a member of the Management Board of IDG Communications Media AG in Munich - a media company and marketing service provider for the ICT industry.

York von Heimburg has been with IDG Communications since 1992. Initially as Managing Director of IDG Magazine, he then founded IDG Entertainment Media and other business units. In 1999, he became Chairman of the Board of IGS (IDG's sales unit). After further internal positions, he became Chairman of the Board of the entire IDG Group in 2004. In 2017, he became President International of the International IDG Group. He is also the author of several non-fiction books, including "Fit for the Future".

External Experts

Sam Altman
OpenAI

Sam Altman is CEO of OpenAI.

He is an entrepreneur and investor, was president of the Y-Combinator, a renowned start-up incubator, and later led the AI research division at OpenAI. He has extensive experience in founding and investing in technology companies and is known for his support of entrepreneurs. Altman has advised numerous successful start-ups and is an influential figure in the technology and start-up industry.

Franziska Bell
bp

Franziska Bell is Senior VP for Digital Technology at bp in San Francisco, USA. She leads software and platform engineering, data science, AI, data analytics and data engineering, among others.

Bell has been with bp since 2021, prior to which she spent six years at Uber, including as Director of Data Science for Platforms. Bell holds a PhD from the University of Berkeley in Applied Mathematics and High-Performance Computing. She describes herself as a technology leader "who drives positive impact at scale and helps people grow."

Toshi Hoo
IFTF Emerging Lab

Toshi Hoo directs the Emerging Media Lab at the Institute for the Future in San Francisco, USA.

Toshi explores the impact of emerging technologies and platforms that are transforming human communication. He has worked on a variety of innovative experimental media projects that use interactive and immersive technologies such as A/R and V/R. Under his direction, EML serves as a prototyping studio, an independent research group, and an active participant in the ever-evolving relationship between humans and the advanced media systems they create.

Ludvig Liljekvist
IKEA

Ludvig Liljekvist is Global Innovation Insights & Foresight Lead at Ikea.

Liljekvist leads the global insights and Foresight capability team at IKEA. He uses world building-, design fiction-, transition design- and storytelling techniques to develop multiple futures. The goal is to assembly a better future for people and the planet. He works at IKEA since 2011 where he started as a global project leader. Before that he worked at SAAB and Manpower – a staffing and recruiting com-

pany. Liljekvist earned his Master of Science at the London Metropolitan University and completed an executive education programme at the University of Cambridge.

Emad Mostaque

Stability AI

Emad Mostaque is the founder and CEO of Stability AI - one of the companies behind Stable Diffusion (Text-to-Image).

Emad Mostaque is a renowned financial expert and entrepreneur. After completing his master's degree in computer science and Maths at Oxford, he worked at various hedge funds in the UK - including Pictet, Frontier and Ecstrat. In 2019, he founded Symmitree - a Start-up that aims to lower the cost of tech for the poorer population. In 2020, he founded Stability AI - funded the Start-up largely with his own capital. In 2022, they announced a $100m seed round at $1B valuation.

Vish Nandlall

Dell Technologies

Vish Nandlall is VP Technology, Strategy & Ecosystems at Dell Technologies in Ottawa, Canada.

Vish is a telecommunications visionary and seasoned executive. He served as CEO of Elefante Group, leading the build-out of mobile networks worldwide. Prior to that, Vish was CTO at Ericsson in North America, developing a $3 billion growth strategy. During his career at leading companies such as Nortel Networks and Telstra, Vish was recognized as a pioneer in the industry and holds several patents for his contributions to LTE and cloud-based mobile applications. Vish is a sought-after speaker on topics such as "Great Expectations: The life and Times of 5G" and "The Real World of Edge Computing."

John Paller

Opolis

John Paller is founder of Opolis -a new system for democratizing employment (DEOs) in Denver, USA.

John Paller is an Industry Leader and Entrepreneur in the field of recruitment, working there for over 15 years. Now he is helping drive systemic change in the employment industry. John was awarded the "Forty under 40" award by the Denver Business Journal in 2014. Previously, he was CEO & Managing Director of several recruiting firms. John also founded ETHDenver - the largest Ethereum based hack-athon in the world (1,500 participants).

Jesse Pollak

Coinbase

Jesse Pollak leads protocol development at Coinbase in Oakland, USA.

Pollak is primarily driving the fundamentals to transform Coinbase into a Web3 company. They expect large parts of the economy to operate "on-chain" in the coming years. Previously, Pollak went through

various engineering positions at Coinbase, has been there for over six years. Previously, he co-founded Clef, a two-factor authentication software.

Amy Webb
Future Today Institute

Amy Webb is CEO and Founder of the Future Today Institute - a leading Foresight and strategy firm.

Amy Webb advises CXOs at the world's most prestigious companies, as well as senior leadership at central banks and government organizations. Amy pioneers a data-driven, technology-enabled Foresight methodology that is now used in hundreds of organizations. Forbes named Amy "one of the five women changing the world" and she is on the Thinkers50 list of the 50 most influential management thinkers in the world.

Stephen Wolfram
Wolfram Research

Stephen Wolfram is founder and CEO of Wolfram Research in Concord, USA.

Stephen Wolfram is a British-American physicist, computer scientist and entrepreneur. He developed the computer algebra system Mathematica. He also designed Wolfram Alpha, a knowledge engine and search engine. Wolfram holds a PhD in theoretical physics from Oxford University. He is the author of several books, including "A New Kind of Science," and has received numerous awards. Wolfram is known for his vision of using computer technology to create new knowledge and solutions to complex problems.

METHODOLOGY

Methodology

This study employs an adapted version of the Delphi method, a qualitative Foresight approach based on expert interviews. The composition of the study involved the following steps:

At the beginning of the study, an interdisciplinary TrendCycle combined with a traditional desk research was conducted by an interdisciplinary team of future scientist to establish a 360° perspective on the complex and evolving topic of Strategic Foresight 2035. The aim with this approach is to dissect this multifaceted issue from all sides, giving way to new avenues of thought regarding its long-term development. To this end, public interviews from relevant experts were analyzed in combination with other sources, forming a first iteration of how the Strategic Foresight industry might develop until 2035, what barriers and drivers are expected in the industry.

Based on that, experts representing the various actor groups were selected using further desk research. These experts were contacted and invited to participate in the further stages of this study. Following the Delphi method, the selected experts were then interviewed in semi-structured in-depth interviews. The interviews were transcribed and then analyzed using the MAXQDA software. Upon completion of the interview analysis, a series of hypotheses on the future of Strategic Foresight was formulated.

All study participants were asked to participate in an online survey to rate some of the hypotheses that emerged from the interviews on the likelihood of their occurrence. The participants were asked to rate only those hypotheses that were particularly contested or controversial, or which were not held by a majority. The purpose of this survey is to consolidate the interview results and to eliminate contradictory hypotheses.

Finally, all inputs were gathered and comprised in this final report to summarise and contextualise the findings. The study report extensively employs approved quotations from the expert interviews.

Please find detailed information on the experts that participated or were drawn upon below. We are very grateful for them sharing their perspectives, either publicly or in form of prolonged participation in this process to enable this study on the Strategic Foresight 2035 in the first place. Special thanks to all the unique perspective of the experts and in the literature review, all crucial building blocks of not just how the industry should be, but how it actually could be in 2035.

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