Exploring the Future at the Edge of Chaos

A transformation of Jackpine using strategic foresight

by Liam Mooney

Abstract

This study examines the application and transformational impact of strategic foresight on a small business, specifically examining Jackpine, a design and strategy firm. The research was motivated by a desire to enhance Jackpine's business model and operational resilience through structured foresight integration. The investigation involved a series of workshops and the implementation of the Foresight Maturity Model (FMM), assessing changes in foresight capacity over time (Grim, 2009). Initial results indicate that Jackpine experienced a significant enhancement in foresight capabilities, with an average improvement of approximately 32% across various foresight disciplines. This improvement was particularly notable in visioning, planning, and scanning, where efforts shifted from ad hoc to mature levels of foresight execution. The study utilized participatory methods, engaging both internal team members and clients in foresight exercises, which facilitated practical applications and insights. The findings underscore the utility of strategic foresight in fostering a proactive, rather than reactive, organizational culture (Conway, 2019). This aligns with Stuart Kauffman's "edge of chaos" theory, which posits that the most innovative and adaptive states occur at the boundary between order and chaos (Kauffman, 1993). By situating Jackpine at this juncture, the firm has cultivated an environment where strategic foresight drives innovation and adaptability. This research contributes to the understanding of how small businesses can effectively implement and benefit from foresight practices, providing a model for others in the industry. Future work could explore the long-term impacts of sustained foresight practices on business resilience and innovation capacity.

Dedication

To Dr. Suzanne Stein, for her brilliant mind and visionary approach to foresight, and for her unparalleled coaching that guided me through this journey.

To Emma Cochrane, thank you for your endless support, late-night discussions, and invaluable contributions that shaped this work.

To all participants who engaged thoughtfully and earnestly—your involvement has profoundly impacted this study and its outcomes.

And to all my former colleagues, employees, clients, and partners, whose shared stories and journeys have made this all possible, thank you.

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In April 2022 my business partner and I flew from Ottawa to Vancouver to meet a mining investor turned tech entrepreneur. In a fishbowl, glass-on-all-sides boardroom overlooking the Rocky Mountains, we learned about a vision to address the endangered species crisis using a new, innovative Non Fungible Token (NFT) / Web 3.0 system as well as a personal finance app to encourage better financial habits in GenZ.

Our host had assembled an accomplished team of young tech entrepreneurs and was focused on turning the most cutting edge technology innovations into business models.

His innovation portfolio however was scattered, unfocused. It became clear that his expertise was investing in businesses, not building and organizing them. Their interpretation of foresight was to adopt what was trending in the technological zeitgeist in an attempt to generate profitable relevance, now. Essentially, their strategy was to be a sheet in the wind - no real direction, vision or purpose in mind.

Rather than looking for potential innovation in weak signals (Conway, 2019), the company was jumping onto trends that were already established trying to turn them into viable businesses. In my experience as a design and business consultant since 2013, late reactions to the operating environment without a purpose often do more harm than good. In most cases, late reactions invested heavily are how companies fail.

These firms enter a negative feedback loop of investing capital and human resources into trending ideas too late, missing emerging signals in the meantime that could contribute to valuable innovation and future profits. When success does not arrive quickly these firms start the cycle over again: investing in trending ideas late. Each time the firm enters a new cycle of failed-innovation-entropy wasting valuable time, capital, human resources and innovative

capacity. The phrase "good money after bad" comes to mind.

Leaving the office, I couldn't help but wonder how long this costly, whiplash approach would last. Little did I know I would soon meet a person who embodied a completely opposite worldview, raison d'etre and way of being.

Later that same evening, I had a chance encounter with a self-proclaimed Cathedral Thinker, dreamer and author. As we would later learn, he played a pivotal role in Vancouver's winning bid for the 2010 Winter Olympics. He explained his work as a kind of "Cathedral Thinking" - a dedication of oneself to a project that could not be realized in an individual lifetime. For him, this philosophy was a way to direct his work and actions towards a clear purpose.

Even though he and his team embraced big-picture, long-term thinking they were not afraid of trying new technologies. For example, those Olympic games were the first to be live-streamed on Facebook, a watershed moment for sport and technology (Menzies, 2012). Leveraging this new technology and social network allowed them to accelerate their goal of connecting as many Canadians, athletes, global citizens, and sponsors together through the Olympic games. The foundational work for those games were so impactful that Vancouver has a chance to host the Winter Games again in 2030 (Chan, 2021).

These back-to-back interactions illustrate the push-and-pull small businesses face nearly everyday: are we changing direction with every new idea or technology that promises rapid growth or, are we committed to a clear direction and prepared to accelerate if the right idea or technology comes along?

This paper explores how to balance long term vision with decisive action through the lens

of one particular small business. By studying new approaches to Jackpine's operations and client engagements, this paper finds that focused exploration of possible futures alongside constant scanning is the essential strategy for enhancing organizational resilience and strategic adaptability in small businesses. The paper will also demonstrate that a small business or team can improve its foresight capacity by an average of ~32% and begin to take targeted, meaningful action toward a future vision in less than 100 days.

This research emphasizes how adopting a foresight mindset - irrespective of the specific tools employed - can generate a shared vision, drive better decision-making and catalyze transformation. By embracing the uncertainty in knowing that the future is not fixed (Conway, 2019), teams are empowered to experiment and take action towards long term goals.

Stuart Kauffman's "Edge of Chaos" theory describes a space where biological systems maintain just enough order to be stable, while embracing chaos to foster adaptations - an evolutionary process (Kauffman, 1993). When applied to other complex systems like economies, technologies and business, Kauffman's unique evolutionary midpoint serves as a guide - a little chaos goes a long way.

"The bias we have is toward certainty and data means that we often ignore and downplay the value of imagination as a valid method for thinking about the future." (Conway, 2019, p. 91)

This frenetic form of balance is crucial for businesses like Jackpine, where navigating between rapid innovation and long-term planning is key to success. By situating Jackpine at this "edge of chaos" (Kauffman, 1993), the firm can effectively use foresight to drive innovative transformations while maintaining its strategic core, preparing it to adapt and thrive in an unpredictable business landscape.

Previous Research: Independent Study

Jackpine is a boutique design, strategy and creative firm founded in 2013. Based in Ottawa, it serves a range of clients in the private and public sectors.

In 2023, an independent study preceding this paper was undertaken to examine the ways in which Jackpine formally and/or informally engaged with foresight methodology. The independent study was inspired by an initial read of *Foresight Infused Strategies* by Dr. Maree Conway.

As the study details, Jackpine has always had an instinct for Futures thinking, especially around the future of technology, but without the structural rigor for consistent application (Mooney, 2023). For more than three years we ran a division called Jackpine Labs that designed and built interactive art on an ongoing basis. Experiments with emerging technology turned into Nuit Blanche installations, fascinations with human-computer interaction led to biofeedback projection pop-ups. We did these things with a passionate-indie spirit, spontaneously, and resourcefully. These were mostly fun, personal projects that were meaningful to us, our direct community of collaborators and community-at-large. Converting this cool, curious youthful ambition into sustained, structured commercial success proved difficult, however.

Our broader design and creative processes had similar structural challenges. Clients came to us for help connecting with their next generation of patrons, governments asked us to explain the technologies of tomorrow and business leaders sought us out for unique creative perspectives. In us, our clients saw the future, because that's where we were keenly, curiously, naively living and creating. We were too blinded by our own ideas about the future, keen to explore it, but not reflecting on our assumptions, exploring potential futures or using any

method. We were simply running with whatever felt "right." This lack of method or rigour came with a cost: a company that ultimately failed after not considering its own future and the future of its own clients (Mooney, 2023).

The independent study that inspired this research highlighted one project in particular where the client asked us to investigate emerging technologies and recommend the best way forward. Our team was excited to point out the limitations of QR codes, a now globally ubiquitous technology, that we viewed as "cringe" and passé in 2013. We failed to anticipate market and technological forces converging in such a way that major cell phone manufacturers like Apple, Samsung and Google would soon ship phones whose camera app would automatically detect QR codes.

Additionally, we failed to consider preposterous, apocalyptic-adjacent futures, like a pandemic emergency that might force mass adoption of these scanning tools in a very short period of time. In such a future we may have seen more value in technologies that were the most accessible to set-up and the most widely known.

The focus of our futures thinking was really on our clients and their specific use case and did not consider the broader landscape, or how the technologies might change as a result of other societal drivers. It was more of an exercise of: what can you use right now that would be of best use for your project.

In some ways the lack of strict process was critical early on. It helped keep complexity low and allowed us to accelerate from a one-person enterprise to twenty person team in six months. It allowed us the freedom to explore new ideas and technologies without editing ourselves too much. We built an identity as one of the most creative firms in the city and

attracted a lot of very forward-thinking creatives to the team despite not having a lot to offer financially.

Eric S. Raymond's "The Cathedral and the Bazaar" illuminates how enterprises align along a spectrum from the open, decentralized bazaar to the structured, hierarchical cathedral (Raymond, 2001). This strategic orientation influences their operational paradigms, technological innovations, and corporate culture.

The bazaar model thrives on a decentralized philosophy, fostering a dynamic environment where innovation emerges from broad, participatory processes. In contrast, the cathedral model values controlled, top-down governance, ensuring stability and meticulous execution of well-defined strategies (Raymond, 2001).

Navigating today's complex business landscape demands an understanding of these models. The optimal approach combines the bazaar's innovative chaos with the cathedral's structured order (Raymond, 2001), positioning enterprises on Kauffman's 'edge of chaos (Kauffman, 1993).' This strategic intersection, as explored in Kauffman's theory, harnesses the benefits of both systems—creativity coupled with order—pivotal for thriving in rapidly evolving markets.

Purpose

The purpose of the study was to understand what kind of enterprise transformation, if any, would occur by introducing formal strategic foresight models and methods to Jackpine. Inspired by a motivation to elevate Jackpine's approach to design and business, we wanted to observe if structured integration of strategic foresight into Jackpine would impact dimensions like operations, innovation capacity and long-term resilience planning.

Given that Jackpine is engaged in design projects with private companies, governments and nonprofits we also sought to understand the value of foresight from the perspectives of these organization types. How might Jackpine adapt traditional academic foresight theories into a business consulting, creative and design context to be relevant for each of these constituencies?

The study set out to answer these two questions:

1. How might the introduction of structured foresight models and methods transform Jackpine's client offerings and internal operations?
2. Given the condensed timeline for testing and implementation, how might we measure and evaluate the effectiveness of foresight methods?

This study also set out to explore which specific exercises would be most applicable to our business and other small businesses exploring foresight. However, it became clear that it was not so much the specific foresight method that mattered but rather the creation and nurturing of a foresight culture. *Enwayaang*, an Ojibwe word spoken by the Anishnaabe, meaning "the way we speak together (*The Way We Speak Together*, 2020)" captures the essence of what we discovered: the act of having focused, intentional conversations in a human way about the future is more important than a particular method or framework. While there are different models that will be more relevant in specific contexts - for example, financial modeling will likely work better with a quantitative framework - this paper does not identify a set list of exercises that are most or least appropriate for a small business.

Theoretical Framework

The theoretical framework for this study is deeply influenced by the insights and

methodologies proposed by Maree Conway, particularly her emphasis on actively co-shaping a preferred future amidst inevitable uncertainties (Conway, 2019). Conway's approach to scanning for signals and exploring various types of futures informed the backbone of our transformation process.

Understanding Futures

Conway emphasizes the importance of recognizing multiple types of futures and introduces Joseph Voros' Futures Cone in which he theorizes about possible, plausible, probable, and preferred futures (Voros, 2007). This broad spectrum of futures expands the limit of our strategic vision beyond the predictable or likely scenarios, encouraging a more comprehensive exploration of what might be possible or desirable.

Challenging Assumptions

A core aspect of Conway's philosophy is to challenge the taken-for-granted views about the future. This involves questioning the biases and assumptions that could skew our understanding of future possibilities. Without doing this you have a filter on everything you interpret and what you think is possible or likely in the future. In recent writing, Conway posits that worldviews, assumptions and biases are the most critical factors in developing our futures-infused strategy (Conway, 2019).

Involving Staff

Conway argues that it is critical to engage staff in the process of setting strategy. This participatory approach ensures that the strategy is not only informed by diverse perspectives within the organization but also enhances the commitment of the team to work towards a preferred future (Conway, 2019). She recommends an integrated approach that combines

Wilber's process for strategy development with Richard Slaughter's social foresight development

model.

Figure 1

Conway's Integrated Foresight Model (Conway, 2019)
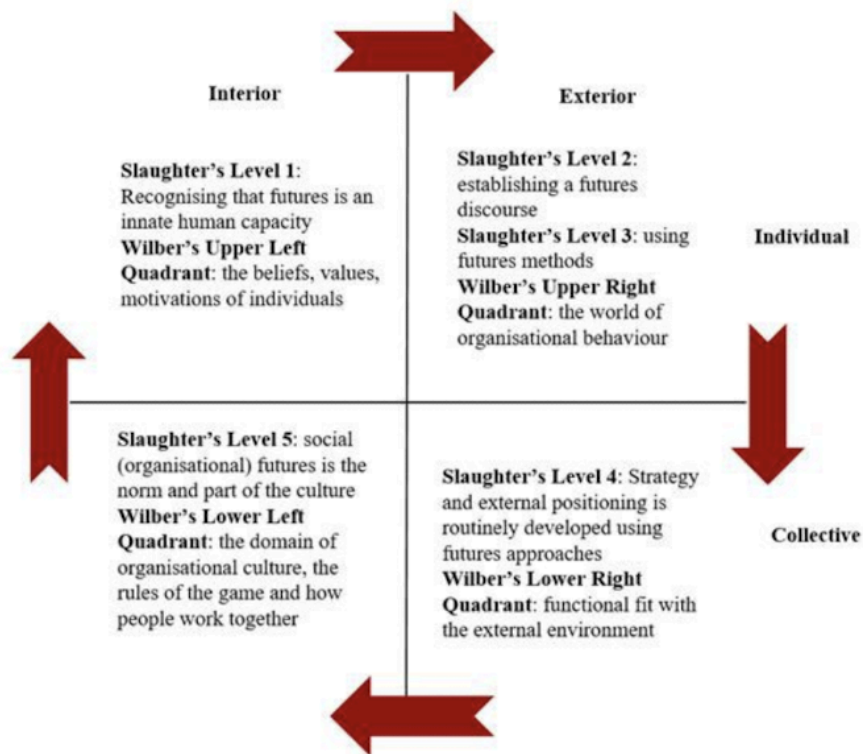
Foresight and Flexibility

       Instead of a rigid roadmap, a foresight-infused strategy is flexible and adaptive, shaped

by ongoing inputs from various foresight exercises and staff contributions. Conway advocates

for an approach that evolves over time based on a dynamic understanding of the external

environment. The strategy includes processes for environmental scanning, strategic thinking, and

decision-making that are continually updated based on new insights and changing conditions.

Design of the Study

From January to May 2024 Jackpine acted as a living laboratory. We conducted weekly team sessions and workshops where we tested foresight methods on our own operations and on selected client projects. Participants both internal to Jackpine and external, were asked to fill out questionnaires throughout the process to track foresight capacity over time.

Participants

The study included a total of six participants: three were internal team members from Jackpine, and three were external contributors. The external group comprised a representative from each of Jackpine's client projects, along with a researcher specializing in foresight-infused strategies.

Internal Participant 1 | IP1. IP1 has been at Jackpine in a creative role for multiple years, emerging as a key leader both within the organization and externally among clients and the community. A polymath creative, she is known for her highly structured approach while delivering innovative, non-linear solutions.

Additionally, IP1 has actively contributed to integrating strategic foresight into Jackpine's operational framework. Her unique insights, particularly on the adaptation of foresight methodologies within creative industries, have been instrumental in shaping the organization's forward-thinking strategies. This perspective will be further elaborated in the "Participant Feedback" section of the paper.

Internal Participant 2 | IP2. IP2 has collaborated closely with Jackpine for many years. With decades of experience in the creative industry, she has adapted to many technological shifts throughout her career. Her expertise spans all phases of small business operations. Her work with

Jackpine not only leverages her extensive experience and network of suppliers, but also imbues our studio with priceless wisdom.

Internal Participant 3 | IP3. IP3 is the author of this study and founder of Jackpine. I participated in each of the workshops as well as studying their outcomes.

External Participant 1 | EP1. EP1 is a senior executive who leads a team of planning professionals. In his work with Jackpine he is seeking a future vision for an urban park for use in a twenty-five year strategic plan. He participated in two workshops and an unstructured interview as well as multiple questionnaires.

External Client Participant 2 | EP2. EP2 leads an entrepreneurial, globally distributed technology company. His team of engineers, mathematicians and software developers came to Jackpine seeking brand strategy advice for a nascent innovation that the firm hopes will lead their company into a new evolution. He participated through questionnaires.

External Client Participant 3 | EP3. EP3 is a strategic foresight thinker known for her writing and leadership in promoting adoption of futures thinking into organizational processes. Her writing seeks to enhance strategic adaptability and proactive decision-making among professionals and organizations. She contributed comments to this paper via a structured interview.

Projects

Three projects were analyzed as part of this study. The first focused on Jackpine's internal transformation process, while the other two involved external client engagements, each with distinct deliverables, timeframes, and implications.

The diversity in these projects was intentionally chosen to explore the broad applicability of our methods and to provide a varied scope for analysis in the study:

- National Site Project: Long-term planning and design for a significant site in Ottawa, involving strategic and detailed collaboration.

- Tech Startup Branding: Rapid, budget-conscious branding exercise for a new technology developed by a high-tech software firm, focusing on naming and logo creation.

- Micro-Business Transformation: Strategic overhaul for Jackpine, a decade-old micro-business, aimed at revitalizing and redirecting its future operations.

Workshops

During the study, we conducted three external and seven internal workshops. For one client we held two half-day sessions centered on prospective visioning and scenario discussions. For the other, we facilitated a strategy session aimed at generating creative outcomes.

Workshop One - Introduction

A basic foresight conversation between myself and two colleagues:

- What is foresight?

- What is strategic foresight?

- How have you used foresight in your life?

Workshop Two - Getting Started

A high level overview of foresight, benchmarking and creative exercises:

- Presentation of strategic foresight concepts

- Career Reflection by Internal Participant 2

- Foresight Maturity Model Benchmarking: developed by Dr. Andy Hines (Conway, 2019)

  a tool designed to evaluate and enhance an organization's foresight capabilities

  systematically. The FMM assesses the maturity of foresight practices across various

  disciplines—from leadership and scanning to forecasting and planning—and categorizes

  them into levels ranging from initial ad hoc practices to world-class foresight integration

  and execution (Grim, 2009).

- Established Basic Scanning Exercise: a generalized foresight practice that collects weak

  signals and emerging trends into a common database organized by type for example

  Social, Technological, Environmental, Economic, Political, Legal and Values

  (STEEPV+L)

- Futures Wheel Exercise: a foresight tool developed by Jerome C. Glenn to systematically

  explore the secondary and tertiary impacts of changes (Glenn & Gordon, 2009).

Workshop Three - Exploring Futures

A thought provoking exercise aimed at exploring creative, critical and prospective futures

exercises:

- The Thing From the Future: an imaginative foresight game developed by Stuart Candy

  and Jeff Watson. This game challenges players to conceive creative artifacts from

  different future scenarios, guided by randomly drawn cards that define the context,

  theme, terrain, and object (Candy & Watson, 2015).

- Brainstormed critical uncertainties and drivers

- Scenario creation and focused discussion: a strategic foresight method pioneered by Peter

  Schwartz, designed to identify and explore critical uncertainties and develop plausible

future scenarios (Schwartz, 1996). This technique involves mapping key trends and

uncertainties, crafting narratives around these uncertainties to construct alternative future

scenarios, and using these scenarios to inform and test strategic decisions (Schwartz,

1996).

Workshop Four - Defining our H3

A big picture, long-term prospective exercise, we split the Three Horizon framework

across several workshops. Three Horizons is a futures methodology developed by Bill Sharpe

and colleagues, utilized for exploring systemic change over different time frames. This approach

maps the first, second, and third horizons representing the current system, the transitioning

system, and the future system, respectively (Sharpe, 1996). Each horizon reflects distinct patterns

of behavior, beliefs, and technologies, helping organizations and individuals to identify

opportunities for innovation and shifts towards desired future states. We started H3 exploration

by asking "What's our preferred future ten years from now?":

- Three Horizons Presentation

- Three Horizons 1 of 3

- Vision Statement Exercise

Workshop Five - Building a Strategy

An attempt to uncover unique positioning, opportunities and strategy that flowed from

our vision:

- Three Horizons 2 of 3

- A presentation on Corporate Strategy, How to Win: a strategic framework developed by

  Roger Martin, focusing on the creation of sustainable competitive advantages through

integrated decision-making. His theory emphasizes the importance of distinguishing

between "where to play" (selecting market opportunities) and "how to win" (developing

unique value propositions and capabilities). Martin advocates for leveraging unique

organizational strengths to create unmatched value in chosen market segments, thereby

structuring strategic choices that drive long-term success (Martin, 2013).

- Ideation, drafting How to Win

Workshop Six - Backcasting

A detail oriented conversation, getting clear about the measurable elements of our vision.

Setting targets and working backwards:

- Three Horizons 3 of 3

- Corporate Strategy, How to Win

- Backcasting: a strategic planning method that starts with defining a desirable future and
  then works backwards to identify policies and programs that will connect that specified
  future to the present. The fundamental question of backcasting asks: "If we want to attain
  a certain goal, what actions must be taken to get there?" This approach differs from
  forecasting by exploring what needs to happen to reach a specific goal rather than
  predicting the most likely future (Conway, 2019).

Workshop Seven - Reporting on Trends

A final workshop to practice signal gathering, implication imagining, and trend report

creation:

- Trend Analysis Presentation

- Co-created a draft Trend Report

Data Collection Strategy

We implemented a comprehensive strategy to monitor the perceptions, experiences, and progress of the six individual participants, two client teams, and Jackpine throughout the study.

Questionnaires

Throughout the study, both internal team members and external clients participated by completing three questionnaires, one at the beginning, one in the middle, and one at the end of the study (see Appendix A). These questionnaires were designed to capture a comprehensive view of the participants' engagement with and understanding of foresight.

Internal Questionnaires. These were aimed at understanding how Jackpine's team members perceived foresight, its benefits, and its challenges. The questionnaires also assessed the impact of foresight on the company's operations and culture, and helped identify valuable lessons and potential areas for future application. The initial questionnaire included ten specific questions to establish each team member's baseline understanding and positioning in terms of foresight, using a framework based on Hines' foresight readiness model to benchmark their starting points.

External Questionnaires. For external participants, the questionnaires focused on gathering insights into their expectations, their perceptions of the value of foresight, and its impact on their projects. This helped evaluate the overall effectiveness of strategic foresight from the client's perspective.

Foresight Maturity Model

This model served as a diagnostic tool for Jackpine (Appendix B), providing the team with a detailed overview of our foresight practices and enabling us to benchmark our processes

against foresight and industry best practices. The data and outcomes from the use of FMM in this study are visualized and described in chapter three: Internal Application.

1-on-1 interviews

All three participants external to Jackpine participated in 1-on-1 interviews. A structured interview was conducted over email with EP3 and semi-structured interviews took place in-person with the EP1 and EP2.

Personal & Observational Methods

During the study, I kept a detailed personal journal (Appendix C) to document the process thoroughly. This journal includes observations of each participant's comments and contributions throughout our workshops and sessions. Additionally, I recorded handwritten notes and took photographs during these collaborative exercises to enhance the richness of the data collected.

Further insights for this paper were gleaned from analyzing personal notes taken during interviews with external clients. I also created sketches of conceptual processes to visually capture and explore the ideas discussed.

Summary

This section lays the groundwork for understanding how Jackpine's adoption of strategic foresight methodologies marks a pivotal shift in its approach to business, enhancing both its adaptability and resilience:

1. Strategic Contrast and Need for Foresight: The chapter introduces contrasting business strategies—trend-chasing versus purpose-driven—and highlights the importance of strategic foresight in navigating business uncertainties and guiding long-term success.

2. Design and Purpose of the Foresight Study: The chapter outlines the structured foresight study initiated at Jackpine, aimed at enhancing the firm's strategic and innovative capabilities through formal foresight models and methods.

3. Dynamic and Engaging Foresight Exercises: A variety of foresight exercises, including workshops and scenario planning, are detailed, illustrating how these dynamic and interactive methods help stimulate creative thinking and future-oriented strategies among team members.

4. Need for Commitment and Focus: The text emphasizes the necessity for an organizational commitment to maintaining focus on strategic foresight practices. It highlights how sustained attention and dedication to these methodologies are crucial for achieving meaningful transformation and resilience.

5. Cultural and Operational Transformation: The chapter showcases the substantial shift within Jackpine from an ad-hoc, reactive business model to a structured, foresight-infused approach, underscoring the importance of this transformation for long-term adaptability in a rapidly changing environment.

Knowledge Diffusion

Knowledge diffusion within a team is crucial for fostering innovation, collaboration, and overall organizational growth. For us, diffusion was not just a learning exercise, it is a social and cultural engagement as well, leveraging the familiar and relaxed setting of communal gatherings to ease the absorption and exchange of new ideas. We aimed to develop approaches that were personalized, socialized, iterative and supportive.

As highlighted in the literature, "A learning organization is not cultivated effortlessly. It

arises from a series of concrete steps and widely distributed activities." (Garvin et al., 2008).

Introducing Foresight Theories

Integrating foresight theories within our small team presented a unique opportunity to tailor the learning experience to each member's familiarity and comfort level with foresight concepts. We adopted a slow, personalized approach, transforming our sessions into intimate, engaging conversations, reminiscent of a *kaffeeklatsch*, complete with fresh vegetables, croissants, and brewed coffee. This nurturing environment was vital in making the learning process both personal and accessible.

We committed to valuing each participant's perspective, ensuring every question was documented and allowing ourselves the flexibility to revisit and explore concepts multiple times. This iterative process of revisiting questions was crucial for our deep understanding and collective sensemaking, even though it often challenged us to avoid the temptation of "satisficing"—settling for adequate solutions rather than optimal ones.

As we honed our nascent scanning discipline, it began to influence not only our internal dynamics but also our relationships with external clients. By consistently scanning the environment, we were preparing to unearth insights that could potentially accelerate both our vision and that of our clients.

To accommodate the diverse learning styles, worldviews, and energies within our team, we introduced a variety of activities and modalities. This wasn't a one-off training session but a sustained, engaging process. True understanding, we recognized, requires persistence and continued engagement.

Participants were encouraged to learn at their own pace, blending direct instruction with interactive discussions that promoted a deeper, collective grasp of foresight. Identifying and supporting "bridge builders" in our team—those enthusiastic about embracing and propagating new ideas—proved pivotal (Conway, 2019). These individuals became catalysts for change, facilitating the spread of foresight methodologies throughout our organization.

Our strategy emphasized the importance of accommodating individual differences while fostering a unified learning environment, a tactic that would prove even more essential in larger organizations where key individuals can significantly enhance the dissemination of foresight methodologies and amplify the effectiveness of our educational efforts.

Introducing Clients to Foresight

In our efforts to integrate foresight into client engagements, we developed two tailored approaches to align with the specific needs and professional backgrounds of our clients. Recognizing the diversity in their experience and familiarity with foresight, we crafted each approach to not only introduce the concepts but also to actively engage clients in applying these insights to their strategic decision-making processes. This personalized strategy ensures that every client can fully grasp and utilize foresight to its fullest potential.

EP1 Introduction to Foresight

EP1 has extensive experience as a senior planner and was already well-versed in forecasting and modeling. To introduce foresight to EP1, it was positioned as an essential tool for assessing long-term strategic impacts of our design recommendations.

Given the nature of his projects, which often span 10-25 years, foresight was presented as a method likely familiar to him that would help us envision multiple future scenarios for the site

he engaged us to design. The foresight approach we used for his project aimed to enhance the

resilience of the designs and management plans by preparing his team with various actionable

options as potential futures unfold. The foresight exercises gave EP1 and his team an opportunity

to consider how assets, operations, and the identity of the park would evolve under different

conditions.

EP2 Introduction to Foresight

EP2, a businessman at the helm of a software company, is intrinsically linked to foresight

through his work in developing next-generation computer vision software for the heavy industry.

EP2's familiarity with foresight, albeit from a technological and spatial computing perspective,

made him an ideal candidate for advanced foresight methods.

For EP2, foresight tools were introduced to explore the multifaceted impacts of new

products his company was developing. The goal has been to help them express the strong vision

they have as a firm. This approach helped in imagining the product's role and relevance across

various future phases, enabling the team to uncover non-linear concepts for naming, branding

and for identifying innovative features.

Engaging Exercises to Enhance Learning

Foresight is not just a concept but a mindset (Conway, 2019), a process, and a skill that

requires ongoing development and refinement. To foster this development effectively, we

employed engaging and participatory exercises that allowed team members to actively explore

and integrate these concepts.

Interactive & Participatory Methods

We utilized exercises like "The Thing From the Future" to stretch the team's creative

boundaries and encourage a break from conventional thinking (Candy & Watson, 2015). These

challenging activities are essential for helping the team grasp abstract concepts of future

scenarios and expand their thinking beyond present limitations because "the future is not binary"

(Schultz, 2015).

Concept Workshops

In these workshops, team members adopted various futuristic roles to examine the

implications of different scenarios. This approach made the learning process not only engaging

but also deeply personal, as participants could directly see the potential impact of foresight on

their professional roles. The workshops provided practical opportunities to apply theoretical

concepts to real-world scenarios, directly influencing Jackpine's operations and client projects.

Continuous Learning & Iteration

Guided by Conway's principles, we have institutionalized the learning of foresight

through regular workshops and training sessions. Feedback is collected after each session to

gauge the team's comfort levels and pinpoint areas that require further clarification. This

feedback shapes the structure of future sessions, making them more tailored to the team's needs

and more effective in reinforcing a foresight-oriented mindset. This approach has been

instrumental in fostering the early stages of a new organizational culture that values long-term

impacts and strategic resilience.

Internal Application

This section details how Jackpine strategically employed a variety of foresight

methodologies to catalyze and shape the strategic evolution of our company. Through

thoughtfully designed workshops, we not only applied these with deep focus methodologies but

also deepened our understanding and honed our approach to long-term strategic planning and innovation. These efforts were aimed at embedding a foresight-oriented mindset across the organization, and catalyzing an enterprise transformation. What follows is a qualitative summary based on my observations during the workshops and insights derived from analyzing participant feedback.

Workshop One

The primary goal of the first workshop was to familiarize the team with the core concepts of foresight, aiming to build foundational individual capacity and foster a culture attuned to foresight thinking. The session unfolded slowly as participants began from varying levels of understanding and engagement with foresight.

IP2 displayed healthy skepticism and was cautious about how foresight could realistically be incorporated into our current operations. This participant also felt somewhat behind in grasping the foresight concepts compared to others.

IP1, already familiar with foresight from previous studies, had a clearer view on how it could be integrated into our work. However, there was concern about the team's capacity to embrace this new approach while continuing to meet client needs effectively.

As IP3, I felt a mix of anticipation and anxiety. Would this initiative be successful? Did I fully understand all the nuances? What if the team found the concepts confusing? Drawing from my teaching experience at Carleton since 2015, I realized the best approach was to do my best and trust that everything would come together.

I also expressed concerns in my notes and journal about potential resistance from the

team in integrating foresight methodologies, mindful of the challenges other organizations faced, such as those encountered by Maree Conway in her attempts to introduce these practices into her team (Conway, 2019).

Workshop Two

By Workshop Two, the team was better prepared and more enthusiastic about engaging in dynamic and interactive foresight activities. Notably, IP1, inspired by Maree Conway's book, was eager to transition from theoretical learning to hands-on foresight exercises, showing a clear shift from passive to active learning. This enthusiasm was a promising sign of the team's readiness to apply foresight in practical settings within our operations.

During this session, IP2 shared a personal anecdote about the shift from Letraset to computers, illustrating the challenges of predicting disruptive technological changes and the need for adaptability in business. This story highlighted the unpredictability of technological evolution and emphasized the importance of monitoring early adopters to glean insights into future disruptions (Dator, 2002).

Meanwhile, I maintained a cautious stance, stressing the importance of commitment to continuous action and openness to change as key to successfully adopting foresight practices. This sentiment set the tone for a workshop focused on applying foresight tools and methodologies to current business challenges.

Establishing a Scanning Practice

The team took concrete steps to establish a structured foresight practice by setting up a dedicated Slack channel and a scanning spreadsheet. This groundwork facilitated a mini scanning session where we explored the potential impacts of Artificial General Intelligence

(AGI) on our industry. Discussions revolved around how AI and eventual AGI could transform

our services and the broader design landscape, underlining the necessity to evolve beyond

traditional models due to rapidly changing market and technological environments.

Futures Wheel Exercise

In Workshop Two, we conducted a Futures Wheel exercise (see Appendix B, Figure B1).

This was instrumental in identifying not only the current and potential direct effects of AGI on

our operations but also the broader, systemic changes that might be necessary. These insights are

crucial as we consider restructuring our divisions and refining our business strategy to

proactively shape future developments instead of merely reacting to them.

Foresight Maturity Model

Beginning in Workshop Two, our utilization of the Foresight Maturity Model (FMM) was

pivotal in assessing and enhancing our foresight capabilities. Initially, our foresight activities

were sporadic and unstructured, marked by "ad hoc" responses that indicated our team's

preliminary understanding of foresight practices. The FMM helped us identify these as areas

where targeted learning and development were crucial.

The model evaluates several dimensions, such as how systematically we scan for trends,

our ability to forecast future scenarios, and our effectiveness in incorporating these insights into

strategic planning. By addressing questions across these areas, the FMM provided a structured

framework that pinpointed our initial shortcomings and guided our progress towards more

integrated and strategic foresight practices. This baseline assessment was essential, as it clarified

the specific domains—like scanning and forecasting—where we needed to focus our efforts to

mature our foresight capabilities.

Progress Towards World-Class Foresight

Over the course of the study, we observed substantial improvements across various foresight disciplines, demonstrating significant growth in both our capacity and maturity:

Visioning. We experienced our most significant advancement in Visioning, escalating from Aware to Mature in three out of four parameters, primarily due to a better utilization of our pre-existing capabilities rather than the development of new skills.

Scanning and Forecasting. We made remarkable progress in Scanning and Forecasting, moving from initial unawareness to confident application. Our team became adept at effectively scanning the environment and forecasting potential futures, reflecting a robust increase in both confidence and competence.

Leadership and Planning. Notable improvements were also observed in Leadership and Planning. Our ability to lead foresight-driven projects and strategically plan for future scenarios saw marked enhancements, which are crucial for sustained organizational growth.

Quantitative Assessment of Growth

Our progress was quantitatively assessed using a points system within the Foresight Maturity Model, where each maturity level (ad hoc, aware, capable, mature, world-class) was assigned a numerical value from 0 to 4. The total potential score for each discipline was calculated based on the number of parameters multiplied by the maximum value. For instance, Leadership, having five parameters, could score up to 20 points at a world-class level.

Figure 2 shows our percentage change per category of the Foresight Maturity Model. These metrics demonstrate our progression from a basic understanding to a significantly more mature grasp of foresight applications, laying a solid foundation for our ongoing advancement

toward world-class foresight integration.

Figure 2

Foresight Maturity Model Ranking: Progress Towards World-Class During Study Period

Note. FMM1 refers to the first Foresight Maturity Model exercise conducted at the beginning of the study period. FMM2 was conducted at the end of the process.

Figure 3 illustrates our team's initial distribution across the Foresight Maturity Model (FMM) levels as of January 2024. Notably, a substantial portion of our capacities fell into the "ad hoc" category, indicating a nascent stage in our foresight development. Our awareness level was higher than anticipated, which may be attributed to the inherently prospective and creative orientation of our business, coupled with our ongoing engagement with various foresight tools and methodologies over the years. At this initial assessment, no aspects of our organization reached the mature or world-class levels, highlighting the areas for potential development and

growth in our foresight practices.

Figure 4 demonstrates a significant transformation from our initial assessment. The transition from predominantly ad hoc levels to a robust mix of aware, capable, and mature levels underscores our rapid progression in foresight practices. This evolution is attributed to several critical factors: our team's relentless focus and resilience in navigating the uncertainties of foresight, the innate foresight abilities embedded in our firm's foundation, and our deep engagement with relevant materials, activities, and literature. Additionally, applying foresight methods in client projects has expanded our team's appreciation for these tools, enriching our perspectives and demonstrating their value in practical settings. This marked improvement in our foresight capabilities reflects a concerted effort to elevate our practices and adapt to emerging challenges effectively.

Figure 3   **Figure 4**

Foresight Maturity Model Results by Level,   *Foresight Maturity Model Results by Level,*
Study Start (Jan 2024)   *Study End (Apr 2024)*
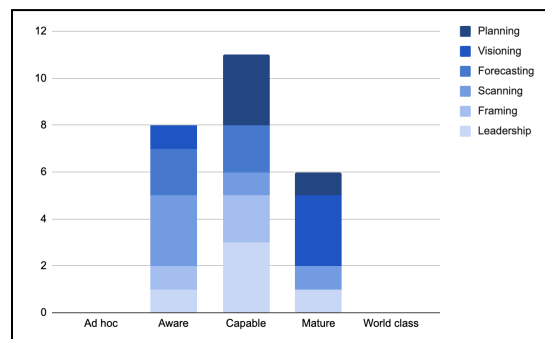
Figures 5 and 6 present this progression of our team's foresight maturity by discipline, measured at the beginning and end of the specified period. The data reveals notable advancements particularly in visioning, planning, and scanning. The accelerated growth in these disciplines can be attributed to our strategic focus on enhancing our foresight capabilities,

leveraging intensive training, and applying these skills in dynamic client projects. This facilitated

a deeper understanding and practical application of foresight, enabling the team to achieve

remarkable progress in a relatively short span.

Figure 5

***Foresight Maturity Model Results by
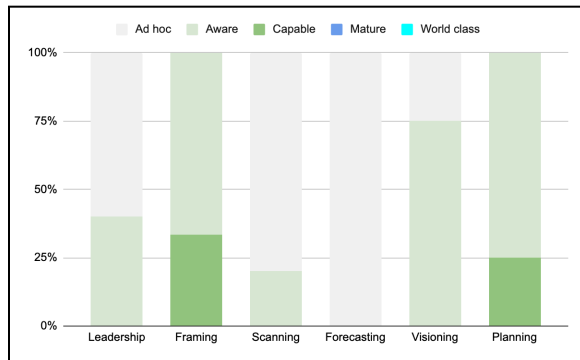Discipline, Study Start (Jan 2024)***

Figure 6

***Foresight Maturity Model Results by
Discipline, Study End (Apr 2024)***
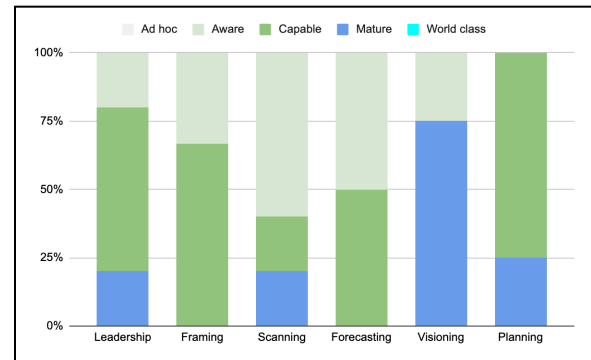
This example demonstrates that a small firm can significantly enhance its foresight

capabilities in a tangible and measurable way within just 100 days, with an average increase

across disciplines of approximately 32% (Appendix B).

In the business world, the ability for a leader and their team to initiate significant

evolutionary changes within a single quarter is highly compelling. Such proactive changes are

crucial for safeguarding the firm's market position, maintaining consumer relevance, and

protecting future profits ahead of major shifts in the operating environment.

Workshop Three

In Workshop Three, we focused on enhancing our foresight capabilities through regular

environmental scanning. The team developed a scanning report template, initially using it

internally and based on established trend analysis frameworks. Our goal is to refine this template

through continual use before potentially sharing it with clients and offering it as a service.

The Thing from the Future

A significant part of the workshop was dedicated to "The Thing from the Future" game (Candy & Watson, 2015), depicted in Figure 7. Initially, our team found it challenging to break free from current paradigms, often projecting present-day concepts into future scenarios rather than generating truly futuristic ideas. However, after five iterations of the game, we noticed improved comfort and speed in conceptualizing future possibilities.

Figure 7

Workshop Three: The Thing from the Future
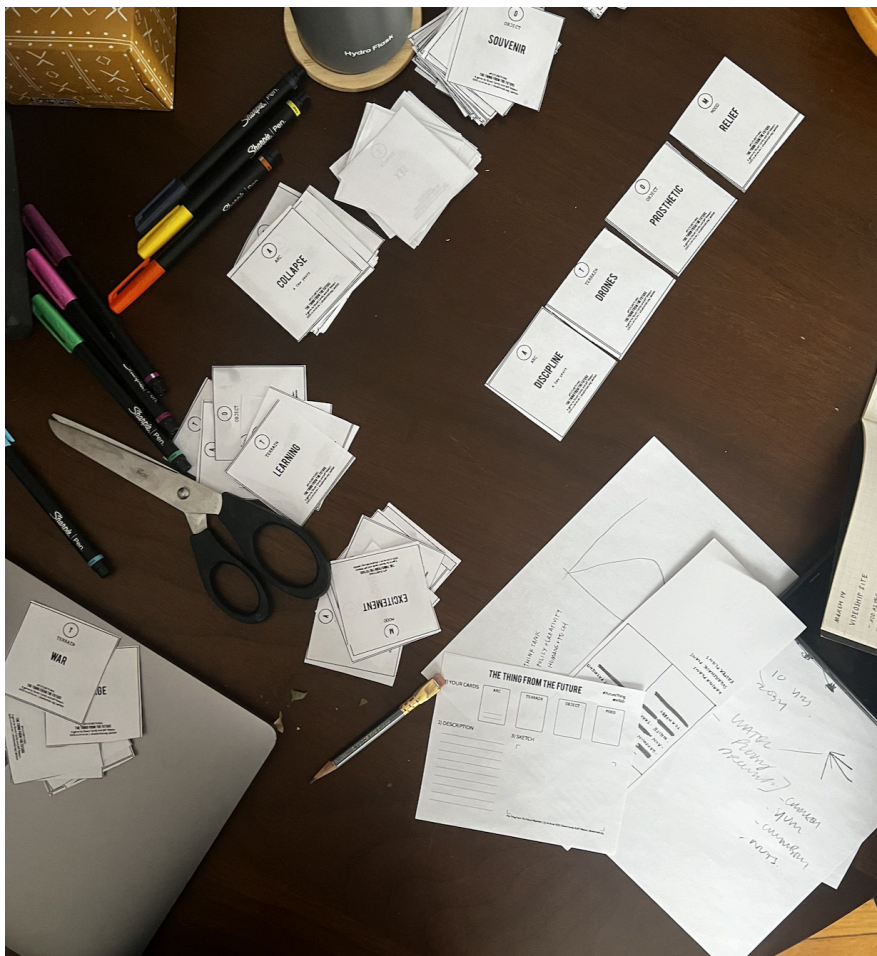
This exercise not only served as an engaging warm-up but also profoundly influenced our strategic thinking, prompting us to consider developing a think-tank model at Jackpine focused on research and addressing significant societal issues, such as the potential impacts of a new industrial revolution, rapidly changing urban environments, and government policies influenced by automation and AGI.

Critical Uncertainties and Scenario Creation

Building on the energy from the game, we delved into critical uncertainties affecting our industry and the broader environment. We mapped potential changes, exploring conditions that could either promote or hinder current trends. This analysis involved looking both backward and forward at equal distances to understand the forces shaping our landscape and the potential impacts of our current trajectory, drawing inspiration from Peter Schwartz's methods in "The Art of the Long Game." (Schwartz, 1996)

In our scenario planning exercises, we considered divergent futures based on the performance of the Canadian economy and the accessibility of AGI tools. We discussed scenarios ranging from an open and innovative Canada to more controlled, restrictive futures where government or tech giants dominate technology access. Each scenario revealed different challenges and opportunities, emphasizing the increasing importance of R&D, innovation, and strategic advisory roles over traditional design services.

Workshop Three: Scenario Creation
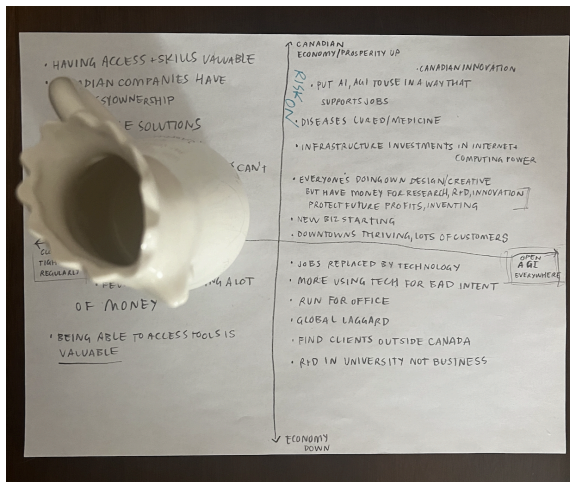
In optimistic scenarios, we envisioned a thriving Canadian economy fueled by

investments in innovation and R&D, leading to burgeoning businesses and vibrant city centers.

In this future, Jackpine would play a critical role in research, development, and creative efforts

shaping this positive outcome. Conversely, in scenarios of economic downturn, our focus might

shift towards serving international clients and collaborating more with universities,

policymakers, and governments rather than private sector entities.

Reflections and Future Directions

Workshop Three proved crucial in crystallizing our understanding of the practical

applications of foresight and the necessity of engaging iteratively and continuously with

foresight methodologies. The exercises reinforced the importance of being adaptive, proactive,

and ready to pivot our strategies based on evolving scenarios.

Workshop Four

In our fourth workshop, we employed the Three Horizons Framework (Sharpe, 1996) to develop the beginning of a comprehensive vision strategy for Jackpine as we look towards 2030. This method allowed us to systematically address our current state, envision our long-term future, and plan the necessary transitions to achieve our goals.

Horizon 1 (The Present)

We started with Horizon 1, focusing on Jackpine's current operations and immediate challenges. This initial phase helped us identify and address pressing issues that required immediate action, grounding our strategic planning in the reality of our existing conditions and capabilities.

Horizon 3 (The Long-term Future- Vision 2030)

Next, we shifted our focus to Horizon 3, where we defined a broad and ambitious vision for the future of Jackpine. This stage encouraged us to think beyond immediate and medium-term concerns and to establish a clear and compelling target for what we aspire to achieve by 2030. Crafting this long-term vision was crucial for inspiring our strategic direction and setting ambitious goals.

Horizon 2 (The Transition)

Finally, we explored Horizon 2, which served as a strategic bridge connecting our current state to our long-term vision. In this phase, we focused on the medium-term strategies and transitional actions necessary to navigate from our present operations towards the envisioned future. This involved detailed planning of the steps, initiatives, and transformations required to facilitate a smooth progression towards the goals established in Horizon 3.

By following this sequence, we took a structured and forward-thinking approach to foresight thinking and planning. Starting with our present state allowed us to realistically assess our capabilities and limitations, moving to our future vision helped set the direction and ambition, and focusing lastly on the transition provided a clear roadmap for achieving our long-term goals. This typical use of the Three Horizons Framework ensured that each stage of foresight and planning was thoroughly addressed, setting a solid foundation for Jackpine's foresight growth.

Envisioning the future of Jackpine

During our focused session utilizing the Three Horizons Framework, we laid the groundwork for a comprehensive re-envisioning of Jackpine's future. This exercise catalyzed a parallel exploration, allowing us to dive deeper and articulate a refreshed vision for our company's strategic direction and culture.

Consolidation and Vision Development. The outcome of this exercise was a detailed re-envisioning of Jackpine's future. We filled out numerous sticky notes to brainstorm and capture ideas, which were critical in our initial imagining of a potential future. The team discussed and defined new services, proposed the establishment of new divisions, and refined our market positioning. We also articulated visions for individual team members, with IP2, for example, being envisioned as a global pioneer in our field.

Sensory Experience. A unique aspect of our discussion was the development of an evocative sensory experience of what the future of Jackpine would feel and look like. This creative approach helped make the future more tangible and relatable, enhancing our collective understanding and emotional connection to the envisioned futures. We described the sights,

smells, sounds and ideas that would be around in the future. Optimism sprung up when talking about dog-friendly offices and bustling creativity.

Reflections on Three Horizons

Workshop Four proved instrumental in transitioning our team from a problem-identification mindset focused only on present challenges to a more expansive, future-oriented perspective. We really had a chance to fix our gaze on the vista of threats and possibilities on the horizon. By navigating through the Three Horizons, we not only clarified our immediate next steps but also laid a solid foundation for the strategic evolution of Jackpine. This comprehensive approach ensures that we are prepared to adapt and thrive in an increasingly complex and unpredictable business environment.

Workshop Five

In our fifth workshop, we continued focused work on our three horizons exercise on refining our H3 vision all enhanced with foresight insights. We also began to formalize our vision into a Theory on How to Win (Martin, 2013). The challenge was to translate our foresight exercises into clear, actionable language that would set up final visioning to guide the organization's future direction via Backcasting.

Articulating Strategic Foundations

Articulating our vision, mission, and purpose statements was exceedingly challenging. Described as a company of "un-peggable ambition," Jackpine needed language that reflected our ambitious goals and foresight-driven approach. This required meticulous care in crafting each word and sentence, ensuring the document would resonate with all stakeholders and accurately reflect our forward-thinking mindset.

Pushing Through the (Pain) Process

The intensity of refining our strategy tested our team's tenacity. Similar to a rigorous fitness regime where 'no pain, no gain' applies, our strategy revision demanded a parallel level of perseverance. Fatigue set in as the days progressed, with motivation waning under the strain of focused, prolonged effort. Yet, persisting through this exhaustive process was crucial. The iterative, grueling nature of this work, though challenging, ultimately led to a cathartic outcome for our team.

Outcome

By the end of Workshop Five, we had a strategy document thoroughly infused with insights from our foresight activities. The emerging vision, mission, and purpose statements were more than text—they were a declaration of our commitment to leading transformation through foresight. This document provides a clear pathway for Jackpine to navigate the evolving landscapes of business and urban futures, aiming for relevance and impact.

Workshop Six

In this workshop, we employed a backcasting approach to refine our vision and develop specific, measurable milestones that would guide our progress over time. This exercise extended beyond crafting a sensory vision, helping us detail how we might track our progress against these milestones.

Backcasting Process

During our backcasting session, we focused on defining and articulating Jackpine's long-term goals, specifically targeting our aspirations for the year 2030. After establishing a specific, measurable, and time-bound goal, we aligned our mission, purpose, and milestones with

our overarching goals and values (Appendix B).

Established Vision, Mission, and Purpose

Vision for 2030: By 2030, Jackpine aims to reshape business and urban futures as Canada's leading independent consultancy, recognized nationally and internationally for integrating design, technology, and strategic foresight into actionable insights that drive industry and community transformations.

Mission: Our mission is to use design, technology, and strategic foresight to pioneer new ways for our clients to understand and transform the world. We commit to delivering innovative solutions that anticipate future challenges and opportunities, keeping our clients ahead of the curve.

Purpose: Our enduring purpose is to foster design and innovation for creating happy, connected people and places. This purpose remains constant, guiding all our strategic decisions and projects to ensure our work positively impacts society and enriches lives.

Operationalizing the Vision

The backcasting exercise highlighted the importance of maintaining strategic flexibility rather than adhering to rigid timelines. This approach allows us to adapt to unforeseen opportunities while staying focused on our 2030 goals. We discussed the need for continuous refinement of our operational strategies to ensure alignment with our long-term vision. Regular reviews were underscored as essential for staying on track and adjusting as necessary to meet our strategic objectives.

Workshop Seven

Workshop Seven was a dynamic and engaging session that not only brought our team

together but also emphasized the fun in assembling information, signals, and proof for a

comprehensive trend report. This exercise sparked insightful discussions about our business and

clients and quickly led to the development of a solid draft report, highlighting trends relevant to

our client base.

During the session, we engaged in "Crystal Balling" (Stein & Goodman, 2007)— a

technique to anticipate environmental changes resulting from identified trends and discern their

potential implications. This approach turned out to be an unexpectedly effective bonding activity,

helping us co-create and align our thoughts.

The workshop underscored the team's shared enthusiasm for scanning for signals and

sharing findings, which streamlined our efforts and contributed to the session's productivity.

Together, we brainstormed topics of interest, searched for pertinent signals, and collaboratively

developed a title for our trend report. The interactive nature of this process allowed each team

member to contribute their unique insights and expertise.

A new commitment emerged from this workshop: the team decided to produce regular

trend reports. This initiative is expected to enhance our foresight capabilities and provide

valuable insights, benefiting both our internal operations and our client engagements.

Participant Feedback

The feedback from internal participants provides valuable insights into the impact of

integrating foresight methodologies on their professional practices and Jackpine's broader

operational dynamics. Their responses not only underscore the effectiveness of these

methodologies but also suggest areas for further integration and improvement. As IP3, my

feedback on the exercises has been captured throughout.

Internal Participant 1 (IP1)

IP1 has found a natural alignment with foresight practices, noting that her work in branding inherently involves envisioning future scenarios. She appreciated the structured approach to foresight introduced during the study, recognizing its potential to enhance strategic planning and decision-making. IP1 sees the foresight methodologies as a formalization of practices she has been engaging with intuitively, such as scenario planning and visioning (Appendix A).

Her feedback underscores a growth in confidence and a desire to embed these processes more deeply into everyday operations, particularly in leveraging foresight to drive creative and strategic outcomes for clients.

Key Insights:

- Positive reception to structured foresight activities like the four-quadrant scenario exercise, which provided clear frameworks for ideation.
- Acknowledgment of the challenges in integrating systematic scanning processes, with a keen interest in exploring digital tools to enhance efficiency.
- Recognition of the importance of foresight in challenging and expanding the team's and clients' assumptions about the future.

Internal Participant 2 (IP2)

IP2's journey with foresight methodologies started with healthy skepticism, but evolved into a recognition of their practical relevance, particularly through exercises like backcasting and the futures wheel naming workshop. She found that these methodologies helped make abstract concepts more tangible and applicable to real-world challenges.

IP2 emphasized the need for integrating scanning and trend analysis into Jackpine's daily operations to better anticipate and prepare for future challenges (Appendix A).

Key Insights:

- Appreciation for hands-on foresight exercises that link directly to tangible outcomes, such as project naming and strategic planning.

- A call for more regular integration of foresight practices to enhance proactive strategic thinking and client service.

- Personal growth through adapting to foresight thinking, which has enabled her to view her long career and the transformations within it through a new lens.

Consistent Participant Feedback

All three internal participants highlighted the transformational impact of foresight on both personal development and organizational change. A recurring theme in the feedback from IP1 and IP2 is the need for ongoing integration and teaching of these practices into daily workflows to maintain competitiveness and responsiveness to change.

Their experiences and reflections indicate a successful initial integration of foresight methodologies within Jackpine, with a clear path forward for deeper incorporation and refinement to maximize their strategic and operational benefits. This feedback will guide future training and development initiatives, ensuring that strategic foresight remains a core competency of Jackpine's evolving business model.

External Application

In this section, we explore the application of foresight methodologies in client engagements, detailing client impressions and how these practices enhance project innovation, resilience, and strategic alignment.

Project A - EP1

Jackpine collaborated with EP1 on a strategic foresight initiative integrated into the site plan design for a major urban park. This comprehensive project employed several foresight methods to reimagine the park's future.

Foresight Methods Applied

- **Scenario Development:** Engaged stakeholders in envisioning multiple future scenarios for the park's development.

- **Trend and Driver Analysis:** Analyzed current and emerging trends that could impact the park's strategic direction.

- **Global Park Scan:** Conducted a comprehensive review of global best practices and innovations in park management and design.

- **Visioning and Backcasting:** Created a visionary outlook for the park and worked backwards to define actionable steps.

- **Three Horizons Framework:** Used to identify potential short, medium, and long-term developments and their implications for the park.

Client Feedback and Insights

Initial Expectations. EP1 expected strategic foresight to enhance innovation, improve resilience, and strengthen strategic alignment within their organization, particularly by identifying new growth opportunities and developing adaptable project strategies.

Mid-Project Reflections. EP1 observed an immediate enhancement in project creativity and strategic adaptability, noting the invaluable role of scenario planning and visioning exercises in uncovering structural flaws and aligning long-term strategic goals.

Continuous Integration. EP1 recognized the foundational role of foresight in repositioning key assets and fostering a cultural shift towards innovation and strategic rethinking within their organization, expressing a desire for ongoing integration of foresight.

Project B - EP2

Jackpine's collaboration with EP2, a Canadian tech startup specializing in volumetric modeling software, focused on developing a product name and brand that encapsulates the technology's future market potential.

Foresight Methods Applied

For this project we focused our workshop on the Futures Wheel method. This exercise facilitated creative ideation, guiding the naming process to align with future market conditions and plausible impacts.

Client Feedback (from Pre-Project Questionnaire):

- **Primary Benefit Expected.** EP2 anticipated that strategic foresight would mainly enhance innovation and creativity within the project.

- **Appealing Aspect of Foresight.** EP2 found the ability to develop a more adaptable and

flexible project strategy most appealing.

- **Anticipated Impact.** EP2 expects the foresight application to lead to a more innovative and forward-thinking brand approach.

- **Additional Comments.** EP2 expressed a strong belief in their direction and plan, seeking assistance in articulating and expressing it more clearly.

Summary

The foresight methodologies applied across our external projects have yielded significant benefits, contributing to more dynamic, strategic, and innovative outcomes for our participants. Key takeaways and the transformative impact of these practices include:

- **Enhanced Strategic Alignment:** Both projects demonstrated a deeper alignment with long-term strategic objectives, ensuring that our clients are better positioned to thrive in evolving market conditions.

- **Innovation and Creativity:** By employing foresight tools such as scenario planning and the Futures Wheel, our clients have been able to break free from traditional thinking patterns, fostering a culture of innovation and leading to more creative solutions and product offerings.

- **Adaptability and Resilience:** The foresight activities have equipped our clients with the tools to anticipate and adapt to potential future challenges, enhancing their resilience against uncertainties and disruptions in their respective industries.

- **Clearer Expression and Communication:** Particularly noted by EP2, the foresight process has aided participants in articulating their visions and plans more clearly, facilitating better communication and understanding within their teams and with stakeholders.

- **Commitment to Continued Foresight Integration:** Feedback from participants indicates a strong commitment to integrating foresight practices into their ongoing strategic processes, highlighting the perceived value of these methodologies in driving continuous improvement and competitive advantage.

These outcomes underscore the effectiveness of integrating strategic foresight into client engagements, not just as a theoretical exercise, but as a practical tool for driving real-world, impactful changes in business strategy and operational execution.

Implications for Jackpine

This section assesses the broad implications of integrating foresight methodologies into Jackpine's operations, spotlighting the transformative changes and strategic shifts that have arisen from our foresight exercises.

Change and Transformation

The adoption of foresight methodologies has dynamically transformed our internal culture and operational approaches. These methods have not only enhanced our strategic capabilities but have also led to the development of new practices such as systematic scanning, trend reports, the creation of new divisions, and the infusion of AGI into our processes to expedite operations.

New Methods and Approaches

Our approach now emphasizes hypothesis-based problem-solving and a portfolio of innovations, ranging from minor aesthetic updates to significant ontological shifts. This new strategic orientation has fostered a renewed collegiality and a collective aspirational vision,

deeply motivating everyone to participate and contribute to building our future.

Client Engagement and Feedback

Adopting a foresight-infused approach has allowed us to engage clients more quickly in high-level, consultative conversations rather than mere order-taking. We've formally aligned our new business process with methods like hypothesis-based problem-solving, significantly enhancing our interactions and the alignment of our strategies with emerging trends.

Organizing Scanning and Information Gathering

Going forward, our scanning practices are organized into weekly co-scan sessions and bi-weekly trend report creation sessions. These are supported by a system of Slack channels and organized into STEEPV+L categories via spreadsheets. While we are exploring new AGI-driven tools to enrich our scanning datasets, we maintain a strong belief that the initial scanning should be human-led to capture the nuances of what's relevant and timely.

Operationalizing the Edge of Chaos

In our strategic evolution at Jackpine, we have actively embraced Stuart Kauffman's concept of the Edge of Chaos—a seminal idea from his work in complexity theory which posits that the most conducive state for adaptive and evolutionary systems is at a critical point between order and chaos. This "edge" is where there is enough structure to maintain coherence but enough instability to allow for new information, structures, and solutions to emerge spontaneously (Kauffman, 1993).

In practical terms, applying the Edge of Chaos to our internal operations has led to a transformative shift in how we conduct our team meetings and approach project management. Instead of traditional, operational check-ins that focus on routine updates and status reports, we

have shifted to a model where meetings are now platforms for dynamic, strategic discussions that encourage high-level thinking and future-oriented planning.

This new approach effectively leverages the fine balance suggested by Kauffman, fostering an environment where team members are encouraged to think creatively and where a degree of uncertainty or ambiguity is seen not as a hindrance but as an essential element of strategic innovation. By reducing the rigidity of structured agendas, we allow for spontaneous ideas and insights that can lead to innovative solutions and adaptive strategies.

Tying the Theory to Project Impacts

This operational shift has had several direct impacts on our projects:

- **Enhanced Creativity and Innovation**. By allowing a more fluid and less structured meeting environment, team members have the space to think outside the box and propose novel ideas that might not surface in a more rigid setting.
- **Increased Responsiveness.** Operating at the Edge of Chaos has enabled Jackpine to be more agile, quickly adapting to new information or sudden market changes that can drastically alter project trajectories.
- **Improved Problem Solving.** The interplay of structure and chaos has fostered a problem-solving attitude that is both analytical and intuitive, harnessing the collective intelligence of the team to tackle complex challenges in unconventional ways.

As we continue to embed Kauffman's theory into our practices, the goal is not just to manage chaos but to strategically harness it as a catalyst for enduring growth and transformation. This involves continuously refining our balance of structured processes and open, flexible strategies to maintain this edge—ensuring that Jackpine not only adapts to future changes but

actively shapes them.

By grounding our strategic operations in the principles of the Edge of Chaos, Jackpine is pioneering an approach that aligns with modern theories of complexity and innovation, positioning ourselves as a leader in strategic foresight and adaptive business practices in an increasingly unpredictable business landscape. This alignment not only enhances our operational efficacy but also ensures that our team remains energized, engaged, and ready to meet the future with confidence and creativity.

Enhanced Client Engagement through Focused Foresight Discussions

While initially, we anticipated leading clients through comprehensive foresight exercises, our experience has refined our approach, teaching us the value of first conducting detailed internal foresight work. This preparation allows us to engage clients afterward in more focused, responsive discussions. This refined method of engagement has proven to be particularly effective in adapting to various client needs and contexts, especially when navigating complex foresight scenarios.

Clients have expressed significant appreciation for this tailored approach, noting how it respects their time and directly addresses their specific strategic concerns. The focused nature of these discussions ensures that every interaction is highly relevant and actionable, which clients find extremely beneficial. This method has not only enhanced our strategic adaptability but also deepened client trust and satisfaction. By receiving foresight insights that are both relevant and immediately applicable, clients are able to make informed decisions more quickly, enhancing their strategic agility in the face of future uncertainties.

Moreover, clients have highlighted the value of engaging with a partner like Jackpine, which invests deeply in understanding future landscapes before facilitating client discussions. This upfront investment by our team in foresight exercises demonstrates our commitment to not just react to trends, but to anticipate them, thereby providing our clients with a competitive edge. Their appreciation underscores the effectiveness of our approach, encouraging ongoing and deeper collaborations, and reinforcing the importance of foresight in strategic planning.

Integrating Hypothesis-Based Problem Solving with Strategic Foresight

As part of our deep dive into strategic foresight, Jackpine has adopted a hypothesis-based problem-solving framework, which emerged naturally from our iterative learning and application of foresight methodologies (Conway, 2019). This approach enhances our capability to test assumptions and refine strategies in response to an evolving understanding of future possibilities.

Example of Hypothesis and Test

Hypothesis: "Implementing augmented reality (AR) features in our client's retail app will increase customer engagement and sales by 20% within six months."

Testing the Hypothesis:

1. **Experiment Design.** We develop a minimum viable product (MVP) version of the app incorporating AR features, targeting a specific segment of the client's market.

2. **Data Collection.** User interactions and sales metrics are monitored through integrated analytics over a six-month trial period.

3. **Evaluation.** Engagement and sales data before and after the introduction of AR

features are compared to assess the impact.

4. **Feedback Loops.** User feedback on the AR features is collected to identify

usability issues or enhancement opportunities.

This structured approach to hypothesis testing draws from the principles popularized by

the lean startup methodology, emphasizing rapid prototyping, testing, and iterative development.

It allows us to adapt our strategies based on empirical data and ongoing project feedback,

ensuring our decisions are both data-informed and aligned with our strategic foresight insights.

Balancing Empirical and Qualitative Approaches in Strategic Foresight

Our adoption of hypothesis-based problem solving is a testament to our commitment to

integrating 'hard' empirical methods with 'soft' qualitative insights. While we rigorously test

hypotheses to gather clear metrics and data-driven insights, we also value the rich, contextual

understanding derived from qualitative assessments. This balanced approach ensures that our

strategic decisions are informed by a comprehensive view of potential future scenarios,

combining empirical rigor with a deep understanding of human and market dynamics.

This method not only helps in making our foresight practices more robust but also

ensures that our strategic planning process is dynamic and responsive to both current realities

and future possibilities. It reflects our broader strategy to not just anticipate future trends but to

actively shape them through informed and agile decision-making.

Insights and Team Dynamics

Understanding the diverse worldviews and instincts of our team members—such as IP2's

transition through technological changes and IP1's focus on systems and data—has allowed us to

tailor foresight exercises to maximize engagement and effectiveness. Recognizing and leveraging

these individual strengths and preferences has enriched our internal collaboration and strategic

discussions.

As IP3, I have learned that my attitude, demeanor, and openness are crucial in navigating

the complexities of integrating foresight into our operations. Embracing discomfort, frustration,

and a persistent belief in our methods have been essential for driving the process forward. This

experience has underscored the importance of leadership qualities such as resilience and

adaptability, not just in managing the project but in inspiring the team to produce world-class

work. I have realized that with the right focus, our boutique consultancy is fully capable of

developing innovative, impactful solutions that can compete on a global stage.

This personalized insight into my leadership approach highlights the critical role of

emotional and psychological resilience in steering our team through the challenges of adopting

new methodologies. It also reflects a commitment to maintaining an environment where all team

members are encouraged to contribute their unique perspectives, fostering a culture of

continuous learning and strategic excellence.

Future Plans

Looking ahead, Jackpine plans to launch a new organizational structure in the spring of

2024, with a refreshed vision and a new theory on how to win, all aimed at making our approach

customer-facing. These changes are designed to not just prepare us for future challenges but to

actively shape the future of our company and the services we offer.

We hope to inspire others with our journey, demonstrating that regardless of a firm's size,

industry, or complexity, adopting these models and methods can create substantial value. These

practices equip organizations to articulate meaningful goals, prepare for uncertainty, and foster

adaptability—the key ingredients of which are focus, tenacity, and commitment.

This comprehensive integration of foresight into our strategic planning ensures that Jackpine remains agile and proactive in a rapidly evolving business landscape, ready to meet future challenges head-on while shaping the industry standards.

Takeaways for Industry

This section synthesizes insights from integrating foresight into Jackpine's operations, particularly emphasizing their applicability to both small businesses and larger corporate settings. Unusually for an academic paper, it examines an internal case study on Jackpine's business transformation. This approach, typically guarded as intellectual property, is shared here to inspire similar enterprises, prospective clients, and even competitors—who might become collaborators—to consider the benefits of such transparency. While there is a risk in giving away competitive edges, the potential for fostering an industry-wide embrace of foresight practices and establishing Jackpine as a thought leader outweighs these concerns.

Lessons Learned

1. Importance of Worldview and Mindset. Understanding and expanding our worldviews, as emphasized by Maree Conway, is crucial before effectively employing foresight (Conway, 2024). This insight is vital for businesses of all sizes, suggesting that the capacity for foresight depends significantly on cognitive openness. For small businesses, fostering a culture that values curiosity and open-mindedness is essential for navigating future uncertainties. Worldviews, bias' and assumptive blocks (Conway, 2019) act as filters on the reality we perceive and the futures we think are possible.

2. Foresight Beyond Tools and Processes. While tools like scenario planning and backcasting are valuable, their effectiveness is greatly enhanced by the dialogic and intra-personal relations between group members. This understanding helps businesses challenge conventional wisdom and explore transformative possibilities. For example, during our "Thing from the Future" game, team dynamics allowed for a richer exploration of future scenarios, demonstrating how playful exercises can yield serious strategic insights (Candy & Watson, 2015). Testing the frame through creative ideation tools from foresight methodologies is powerful.

3. Practical Integration of Foresight. For creative and consulting firms, integrating foresight involves enhancing client services and internal strategic processes. This dual approach ensures that foresight becomes a core element of service delivery, enabling firms to anticipate market changes effectively and innovate proactively.

4. Foresight as a Continuous Practice. Making foresight a continuous practice rather than a one-time strategic exercise is challenging but crucial. Jackpine has established weekly co-scan sessions and bi-weekly trend report creation sessions. These activities are structured around a system of Slack channels and organized into STEEPV+L categories via spreadsheet, maintaining a human-led initial scanning process supported by AGI tools for data summarization and connection.

For Small Businesses

In today's rapidly changing business environment, small businesses must be particularly agile and forward-thinking to stay competitive. Foresight exercises offer valuable tools to help these enterprises not only anticipate future challenges but also harness potential opportunities.

Smaller firms can significantly benefit from incorporating foresight exercises to enhance team

cohesion and stimulate strategic thinking. By engaging in structured yet creative foresight

activities, teams can develop a unified approach to addressing future challenges, while also

nurturing a collaborative environment. Here are some practical ways small businesses can

integrate foresight methods and mindset into their strategic practices.

Cultivate an Adaptive Culture

Encouraging a culture that is flexible and responsive to change is essential. Small

businesses benefit from regularly engaging in foresight activities to stay ahead of industry trends.

This adaptive culture is crucial because it balances the tension between current operational

demands and future strategic needs, ensuring businesses remain agile and prepared.

Experiment with Foresight Tools

Start with simple tools like scanning and trend analysis, and gradually integrate more

complex exercises. Beginning with engaging, lighter exercises builds team confidence and

encourages broader participation.

The Foresight Maturity Model (FMM) can also guide small businesses in progressively

integrating more advanced foresight practices, providing a structured path from basic to

advanced levels of foresight capability (Grim, 2009).

Examples of Foresight Exercises for small teams:

- **Environmental Scanning and Trend Analysis.** Teams engage in environmental

  scanning to detect early signals of change within the market or technology

  landscapes. This practice not only keeps the team informed but also fosters a

  proactive approach to strategic planning. For example, by organizing bi-weekly

scanning sessions, team members can share insights and discuss implications, ensuring that all voices are heard and that diverse perspectives are integrated into the decision-making process.

- **The Thing from the Future Game.** This game is an excellent tool for smaller firms to encourage creative thinking about potential futures. Teams use cards to generate random scenarios, which challenge them to think outside their usual patterns and envision innovative solutions or products. This exercise is not only fun but also opens up new ways of seeing the business environment, encouraging team members to think broadly about opportunities and threats (Candy & Watson, 2015).

- **Crystal Ball Exercise.** In this exercise, team members speculate about future developments in their industry by imagining they can see into a crystal ball. This method allows for a free-flowing discussion that can highlight unexpected areas of concern or interest, and helps in forming a collective vision for the firm's future. The exercise can be particularly useful in aligning team members' perceptions and expectations about strategic goals (Stein & Goodman, 2007, #).

- **Collaborative Trend Mapping.** Teams collaboratively map out trends and their potential impacts on the business. This exercise not only helps in understanding the trajectory of emerging trends but also in identifying how these trends could interact to create new business opportunities or threats. The process involves creating visual trend maps that can be continually updated and referred to during strategic discussions.

By incorporating these foresight exercises, smaller firms can cultivate a dynamic and

engaged team atmosphere that is conducive to innovative thinking and strategic alignment. Each

exercise helps to build a collective understanding of future possibilities and prepares the team to

tackle them together, making foresight a practical and integral part of their operations. This

approach not only enhances team dynamics but also ensures that the firm remains adaptable and

forward-thinking in a competitive landscape.

For Larger Corporations

Structure Small Innovative Teams

Utilize smaller teams to pilot foresight initiatives, acting as innovation labs within the

larger corporate structure. Protect these teams from being pulled into daily operational demands

by ensuring they have dedicated resources and management support.

Integrate Foresight Across Departments

Ensuring foresight is integrated across the organization enhances adaptability and

anticipates future trends. However, it's vital to avoid diluting foresight's impact. Comprehensive

foresight training across departments can prevent this dilution, fostering a futures-literate

company culture.

Leveraging Foresight for Client Engagement

Foresight can play a pivotal role in deepening client relationships by providing a

framework for strategic discussions that anticipate future trends and challenges, enabling

businesses to deliver proactive solutions.

Visualize and Plan for Multiple Futures

Help clients understand and plan for various potential futures using methods like scenario

planning, futures wheel, and the Three Horizons Framework. This approach not only enhances

strategic flexibility but also prepares clients to capitalize on opportunities and mitigate risks

effectively by anticipating plausible, preferable, and probable futures (Voros, 2007).

Foresight as a Strategic Value Addition

Position foresight not just as a planning tool but as a strategic asset that adds significant

value to client engagements, enhancing their ability to accelerate toward their vision by being

poised for chance opportunities and more prepared to navigate future uncertainties.

Conclusion

Reflecting on the profound journey that began with a trip to Vancouver in 2022, this

paper has explored the transformative power of foresight in shaping the future of small

businesses like Jackpine.

This experience has revealed a synergy of rapid technological adoption with the enduring

principles of "Cathedral Thinking." Reflecting on this synthesis, it becomes evident that our

foresight practice straddles the dynamics of both the bazaar—with its nimble adaptability—and

the cathedral, characterized by its visionary steadiness.

Throughout this study, we have integrated foresight methodologies deeply into the

operational core of Jackpine. This shift from an initially unstructured approach to a more

systematic application of foresight has significantly enhanced our internal coherence and our

offerings in the market.

The application of the Foresight Maturity Model has been instrumental in this

transformation, providing a structured framework to benchmark our progress and identify future

areas for growth. This integration has not only bolstered our internal operations but also enriched

our client services, empowering them with resilient, foresight-driven strategies.

The insights gained from embedding foresight into our strategic fabric have shifted our organizational stance from reactive to proactive. This shift aligns with Stuart Kauffman's edge of chaos theory, which posits that the richest experiences of complexity and creativity occur at the boundary between chaos and order (Kauffman, 1993). By positioning ourselves on this edge, Jackpine has fostered a dynamic environment where innovation is routine and strategic foresight is a continuous engagement.

Jackpine's name itself is a metaphor for the creative process, akin to the chaotic and energetic forces of a forest fire that unlock growth in a new, lush forest. This concept of creative destruction and the panarchy loop resonates deeply with our belief that every individual, regardless of background, can contribute valuable perspectives to creative problem-solving. Ideas in the creative process, much like burnt organic material on the forest floor, accumulate over time, creating a fertile ground for a good idea to take root, grow, and spread—mirroring the lifecycle of a Jackpine forest where the pinecone only opens with fire.

As we look to the future, our commitment to deepening the integration of foresight methodologies is unwavering. We are poised to further entrench these practices across all facets of Jackpine's strategic planning and operations, continually adapting to and pre-emptively shaping the evolving business landscape.

This foresight journey at Jackpine exemplifies the strategic utility of foresight in driving innovative transformation and offers pivotal lessons for other enterprises eager to leverage this potential.

Elements of a Foresight-Infused Strategy for Jackpine:

- Continuous environmental scanning

- Routine scenario planning

- Strategic adaptability to emerging trends

- Foresight integration into daily operations

Industry Takeaways:

- Criticality of foresight for competitive advantage

- Foresight as a mechanism for proactive business planning

- Leveraging foresight for innovation and sustainability

In closing, our proactive approach, guided by focused, collaborative foresight, equips us not only to anticipate but also to actively mold the future, ensuring Jackpine's preparedness for the future and maintaining our relevance with stakeholders and customers in a rapidly changing world.

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Appendix A: Questionnaires

Please see the documents at the following links:

- [IP1 Pre-project](#)

- [IP1 Mid-project](#)

- [IP1 End-project](#)

- [IP2 Pre-project](#)

- [IP2 Mid-project](#)

- [IP2 End-project](#)

- [EP1Pre-project](#)

- [EP1 Mid-project](#)

- [EP2 Pre-project](#)

Appendix B: Foresight Workshops

Please see the documents at the following links:

- [Futures Wheel Exercise](#)

- [Foresight Maturity Model Jan](#)

- [Foresight Maturity Model April](#)

- [Backcasting](#)

- [Trend Analysis](#)

- [Three Horizons Sticky Notes](#)

- [External Scenarios](#)

Appendix C: Journal

Please see the document at the following links:

- [Process Journal](#)