

Designing the Future: How Balanced Design Leadership Can Drive Desirable Futures

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Abstract: Without ideas and scenarios about the future, there can be no conversation about what the future might look like, let alone how to get there. Design plays an essential role in the creation of tangible visions of the future through the visualization of scenarios that promote dialogue among stakeholders and foster collaboration and motivation to implement future scenarios. A foundation for future-oriented thinking can be achieved when a common purpose is defined and shared by its stakeholders along with sensemaking to ensure the relevancy and meaningfulness of future scenarios. This study recognized and described the following four building blocks for designing futures: enabling the team and project, establishing future scenarios, evaluating desirable futures, and exciting people's motivation to achieve that future. Additionally, the authors identified the following two core activities: imagining futures and leading futures, which, combined, result in designing futures. Thinking about the future will be a catalyst for rethinking the future.

Practical Implications: The practical implications of this study highlight the complex and often conflicting interests of designing futures that require effective design leadership through balancing design leadership behaviors. Understanding the dimensions and mechanisms that drive organizations into the future is critical to successfully designing desirable futures and inspiring key stakeholders to take responsibility for these futures. The authors recommend that the future scope of this research is investigating the impact of organizational characteristics that go beyond for-profit only, and the role and impact of artificial intelligence in designing futures

Keywords: Common purpose; Designing futures; Design leadership; Future scenarios; Motivation; Sensemaking.

1. Introduction: Theoretical framework

This study delved into the intricate interplay of organizational transformation, design leadership, and futures studies. Sensemaking plays a pivotal role in the space of interconnection between these disciplinary fields. As proposed by Ancona et al. (2020), Ancona (2012), and Weick (1988, 1993, 1995), sensemaking is a key process and approach through which individuals and organizations interpret and construct meaning from complex, ambiguous, and often contradictory



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Received on: 10.09.2023 | Revised on: 15.12.2023 | Accepted on: 21.12.2023

Cite as – Quint, E., Corà, T., & Fazio, L. (2023). Designing the Future: How Balanced Design Leadership Can Drive Desirable Futures. *International Journal of Design and Allied Sciences*, 2(2), 1-19. DOI: [10.5281/zenodo.10446637](https://doi.org/10.5281/zenodo.10446637)

information. This enables an understanding of the evolving landscape, stakeholder alignments, and identification of meaningful paths forward while transforming organizations.

Furthermore, the dimensions of purpose and motivation play central roles in this theoretical framework. Joly and Lambert (2021) highlighted that a clear sense of purpose serves as the bedrock for creating shared visions of the future. This sense of purpose fosters cohesion, aligns actions, and drives organizations toward desirable outcomes. Additionally, insights from Seligman et al. (2016), Railton (2012a), and Gilbert and Wilson (2007) stated that motivation plays a vital role in inspiring individuals and organizations to strive toward their envisioned futures.

The role of design leadership as a catalyst for desirable futures is underscored by the contributions of Gemser et al. (2023) and Quint et al. (2022). These scholars emphasized how balanced design leadership behaviors guide organizations in navigating the tensions between transformation and consolidation.

To articulate desirable futures, this study drew upon insights from Corà et al. (2023), Gümüşay and Reinecke (2021), Buehring and Liedtka (2018), and Candy and Dunagan (2017), which highlight the multifaceted nature of designing desirable futures, encompassing collaborative efforts to design desirable futures by envisioning potential scenarios, assessing their viability, and aligning them with organizational values and strategic objectives.

The above-mentioned work focused on the topics of purpose, sensemaking, motivation, and design leadership. However, this study highlights the dynamic interplay among these topics, resulting in the creation of desirable futures. This framework prompted the investigation of the dimensions and their interactions, uncovering the mechanisms that drive organizations toward futures that are not only desirable but also aligned with their purpose and supported by effective design leadership.

2. Research Question

This study was triggered by the argument that design leaders play a significant role during the various stages of designing the future. This led to the following research question that this study sought to clarify:

What specifically entails a design futures project and, thus, what could be the specific role and behaviors of a design leader?

The authors aspire to deliver a framework for the core activities of designing futures and, specifically, the roles of design leaders as recognized through their behaviors. To answer this research question, the authors have defined their research methodology as described in the following paragraph.

3. Methodology

3.1. Research Approach

Qualitative research allows for in-depth insight into underexplored phenomena (Denzin & Lincoln, 2011). Therefore, we adopted exploratory, qualitative methods to elicit insights into and to understand the role of design leadership in designing the future.

Our study was inspired by the guidelines provided by Gioia et al. (2013), which show the identification of concepts that describe or explain a phenomenon of interest and inform dynamic relationships between those concepts. The three authors gathered their primary data set for this study by conducting a mid-2023 survey about design futures and the role of design leadership.

3.2. Participants

We invited senior innovation and design leaders to take part in an open-ended voluntary survey to which twenty professionals from twenty different organizations across three geographical regions responded. All of them were acting at the executive level (having the title of CEO, CDO, CIO, head of, (S)VP, or similar) and were leading design or innovation efforts for a particular competence area, business unit, or region within their organization. Each leader was selected based on the expected relevance of the design or innovation field, the size of the organization (medium and large organizations with different business units and/or functions), and the complexity of interactions across geographies, processes, policies, and strategies.

Leaders' organizations are for-profit and represent a broad range of industries. Each operates on a global scale in the B2B and/or B2C markets and has its headquarters in Europe (65%), the Americas (20%), or Asia Pacific (15%).

3.3. Procedure

The survey focused on six main topics related to design leadership and designing futures: why explore the future; who is responsible for exploring the future; how is the organization using the results of futures exploration and what are the related challenges and risks; what is the role of design leadership in designing the future; and what is the role of a company purpose in designing the future.

3.4. Ethical Framework

To enhance information sharing, we assured the participants that their responses to this study and possible quotes would only be shared anonymously. All quotes used in this article are from the survey respondents. This study's objective and the data collection process were clearly explained to the participants, and we emphasized how we would use their answers and results. The respondents were encouraged to freely respond to the survey questions, allowing them to skip a question if it was not relevant. We also enriched the data from the survey with additional data sources, for instance, by examining the leaders' LinkedIn accounts and social media posts as well as professional industry reports in which the participants of this study or their companies are mentioned.

3.5. Data Analysis

Our data analysis followed qualitative content analysis (Gioia et al., 2013). We used an iterative approach that involved multiple discussions among the authors to reconcile diverging interpretations and going back and forth between the data, emerging concepts, and relevant literature. The iterative approach helped not only to identify potential concepts but also dynamic relationships between them.

In addition to the data collected for this publication, we based our study concerning futures design on the in-depth interviews conducted by Corà and Fazio in 2022 for the book 'Futures by Design' (Corà et al., 2023). Regarding leadership behaviors, we based our study on the book 'Design Leadership Ignited' (Quint et al., 2022) and the article "Leadership to Elevate Design at Scale: Balancing Conflicting Imperatives" (Gemser et al., 2023). Our study is additionally grounded on the authors' 20-plus years of in-depth experience as practitioners in the fields of design leadership, innovation, and creating visions for the future.

4. Imagining Futures

Thinking about the future is central to several human activities, both professional and personal. Recent research stated that 40% of people's thoughts are focused on the future (Baumeister et al., 2020). The ability to imagine and adapt to the future is now considered a key human trait, so much so that Seligman (2016) renamed 'homo sapiens' to 'homo prospectus.' Future-oriented thinking is an important state of mind needed to care about and take ownership of designing the future.

Imagining the future is inspired by the signals of emerging realities, such as new behaviors, sociocultural trends, and future technologies that can inform and diverge into desirable scenarios. Imagining the future is built on these foresights and the creativity, collaborative approaches, and imagination of designers who will be instrumental in creating desirable future scenarios for evaluation and dialogue with the main stakeholder groups. By imagining the unknown, we can create scenarios that do not yet exist and that might occur in the future. The head of design and research of a financial services company summarized the following:

The best way to respond to the future is to imagine it.

When imagining the future, organizations can discover new behaviors for certain conditions and adapt them to a wider range of circumstances. In this way, they can anticipate and build the capabilities, behaviors, and approaches needed to become more adaptable and prepared for change. Designing the future will help build the muscles needed to drive transformation and stay relevant and meaningful in the future. As the head of design of a fast-moving goods company shared:

Designers have an innate ability to take complexity and translate it into simple, intuitive, and easy-to-understand territories, platforms, and concepts to guide direction and progress.

At the heart of activities imagining futures is informed by sensemaking to ensure the meaningfulness and relevancy of envisioned future scenarios. Another key essential dynamic of imagining a future is represented by setting a common purpose as the foundation for any future-oriented activity and motivating people to become the main actors in making this future happen.

Imagining futures can fuel dialogue about the possible impacts on people, businesses, and society, and sensemaking can inform and guide the creation of those future scenarios. The following two paragraphs elaborate on setting a common purpose and sensemaking as the foundation for designing futures.

4.1. *Setting a Common Purpose*

If we define innovation as the realization of a creative idea, intended as a mental representation of an original and useful future, implemented on a large scale (Seligman et al., 2016), imagination is the first and most fundamental skill enabling innovation. Imagining involves being able to create mental representations – visual, verbal, and auditory – of events that are not happening here and now but are alternatives to current perceptions. Imagining possible futures, defined as “prospection” (Gilbert & Wilson, 2007), is an intrinsic capability of human beings that fundamentally shapes our cognitive and motivational systems.

Our ability to prospect is fueled by desire, not intended as a mere impulse toward something immediately appealing to us but rather as the ability to motivate ourselves through self-created images of desirable futures (Railton, 2012a). To desire, therefore, is to want to act because we like the idea of what that action might produce, even if it is something new or far off in the future. This ability to mobilize motivation in the present – perspective motivation (Seligman et al., 2016) – on behalf of simply mentally representing a potential future scenario plays a key role in sustaining innovations in human history and is the very foundation of our social, moral, and economic lives (Railton, 2012a).

Thanks to this perspective of motivation, inspiration from our purposes can be translated into strength and determination to continue pursuing our goals, even when they entail costs, uncertainties, and mistakes (Seligman et al., 2016). The same happens in organizations. Companies are not soulless entities, but human-made organizations formed of individuals who work together toward a common purpose. When this purpose aligns with their own search for meaning, it can unleash a kind of human magic that results in outstanding performance (Joly & Lambert, 2021).

Lacking an agreed definition in literature, we adopted this broader view of company purpose as the main reason of an organization itself that embraces a set of beliefs about the meaning of a firm’s work beyond quantitative measures of financial performance reflected in decision-making processes (Gartenberg & Serafeim, 2022). The purpose of an organization is to align discretionary efforts (Rotemberg & Saloner, 2000) by providing a shared vision of individuals’ direction, especially as companies grow in size and complexity (Ghoshal et al., 1995).

Having a clear and shared purpose within an organization does not necessarily motivate individuals to complete their daily work to the best of their ability; in fact, it is up to the organization’s leadership to articulate that purpose and then create a structure that enables individual employees to connect it to their work (Gartenberg & Serafeim, 2022). In defining an organization’s purpose, it is critical to focus on human beings’ needs; it is crucial to connect to what members of the organization care about, what motivates them, and why they come to work every day – the Ikigai concept (Joly & Lambert, 2021).

If we define a company as an organization made up of individuals working together to achieve a common purpose, then it becomes imperative for organizational leaders at all levels not only to be clear about their own reasons for working at the organization but also to understand what motivates the people around them (Gartenberg & Serafeim, 2022).

Defining an organization’s purpose is a human-centered process. As in a design process, it starts with people, from frontline employees to top management (Corà et al., 2023). Beyond individual specifics, most people want to do something good for someone else. Therefore, it becomes easier to see how this can extend to colleagues, customers, and all stakeholders within the organization’s orbit (Joly & Lambert, 2021). As such, a design leader plays a vital role in accommodating and defining a common purpose for his or her design team and other contributors while designing futures.

4.2. *Sensemaking*

Moving toward desirable futures requires an in-depth analysis of the current state, where information about the ecosystem in which we are immersed is gathered and organized. A systemic approach makes it possible to uncover a common and adaptable platform of meanings and tools to motivate different people in a team or organization. Understanding how people perceive and create value, and at the same time understanding the integration of meaning that internal and external stakeholders appreciate, are essential prerequisites for successfully innovating as a way finder to a future context.

Building a shared vision and collective meaning within an organization requires multiple actions, such as processing numerous types of knowledge within structured thinking, gathering input from multiple sources, and integrating it into a single conceptual framework. In other words, sensemaking is required (Weick, 1988, 1993; Weick et al., 2005).

People give meaning to their collective experiences through sensemaking. In the field of organizational studies, sensemaking was defined by sociologist Karl Weick (1995) as a tool for solving complex problems, tackling tough questions, and acting to understand the value of what we do for ourselves and others to make more effective decisions.

Creating conditions to translate decisions into more effective actions is supported by a sensemaking approach (Ancona, 2012), especially when actions are unexplored, and we cannot refer to similar experiences (or best practices). Cartography is perhaps the most appropriate comparison to sensemaking. A map allows one to move confidently through an unfamiliar space and empowers action. If all members of a team or organization have a common map of their environment, better coordinated action is facilitated.

It is not about finding the right answer; sensemaking is about creating a shared framework of knowledge, experience, and conversation among all relevant stakeholders, from which the most pertinent answer for that group will emerge. This means an iteration from the simple to the complex and back again based on continuous learning by encountering the real world (Ancona et al., 2020). A transition to the complex occurs when new information is collected and new behaviors are implemented; then, as new data is ordered and patterns are identified, the complex becomes simple again.

Sensemaking can mean learning about the evolution of markets, new customer needs, or innovative technologies; it can mean understanding why a previously successful business model no longer works; or it can help identify a problem that an organization has never faced before (Maitlis & Christianson, 2014). According to Verganti et al. (2021), human design activities are increasingly becoming sensemaking activities, for example, understanding what problems need or can be addressed. This shift in focus calls for new theories and brings design closer to leadership, which is inherently an activity of sensemaking.

5. Leading Futures

In a rapidly evolving landscape, decision-makers and leaders, including design leaders, must adapt their approaches. This applies to their beliefs about change and the future and to the leadership style and related behaviors they adopt.

In this study, we visualized the role of design leadership, through its behaviors, as an ever-present force that enables a transition between the following four building blocks, which are the phases of designing the future through a coherent and potentially circular iteration (see **Figure 1**):

- **Enabling the team and project**
Define the boundaries and conditions for a team and project in collaboration with the main stakeholders and agree on expectations and outcomes for success.
- **Establishing future scenarios**
Create and visualize future scenarios based on emerging realities research.
- **Evaluating desirable futures**
Have key stakeholder conversations about the validity and feasibility of the scenarios and the expected future impacts.
- **Exciting people's motivation**
Identify and allocate commitment to follow-up action based on validated and tangible preferred future scenarios.

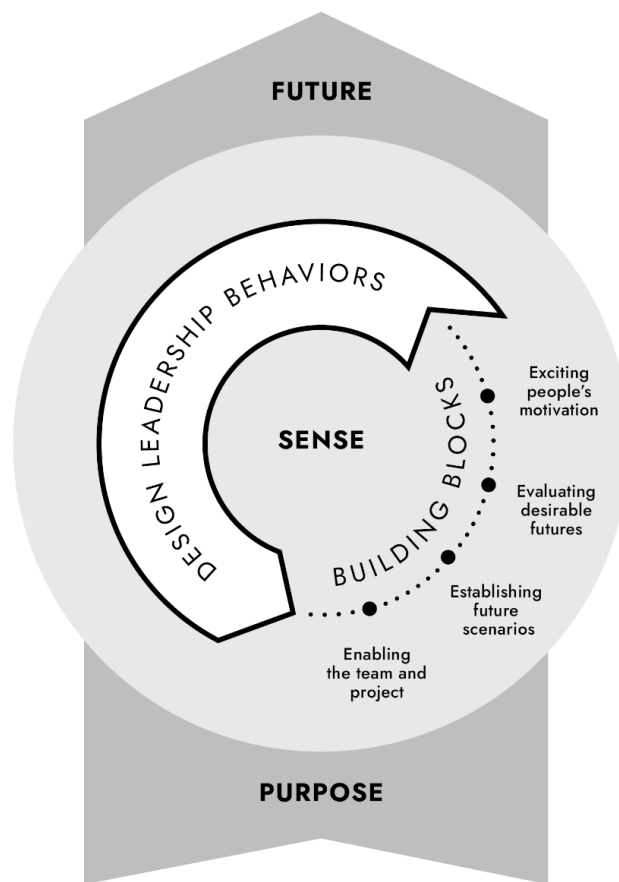


Figure 1. Design leadership behaviours guiding the four building blocks from purpose to future through sensemaking.

To successfully design futures, a design leader must thoughtfully balance his or her leadership behaviors across the four building blocks, which we have captured in this study by the core activity of “leading futures.” In the following two paragraphs, the four building blocks and design leadership behaviors are described, along with their activities and considerations.

6. Building Blocks

6.1. Enabling the Team and Project

Desiring to bring something meaningful to the world requires successful integration of two pivotal aspects: attention to an external context and attention to one’s internal culture and way of doing things (Lockwood & Papke, 2018). This inner-outer tension empowers organizations to be more conscious of who they are in the world in which they live and, therefore, to be better equipped for long-term success in a rapidly changing business environment.

All participants in our study expressed a strong need to increase their understanding of their environments’ future and described this as a crucial driver of their organization’s sustainability. According to the head of design of a financial services company:

The risk of not exploring the future at all is that the organization may become stagnant and outdated.

As per another response from the head of design of a home appliances company:

The people inside the organization could believe that you already know everything and have a static view of consumers, business, and technology.

Defining boundaries through sensemaking is the first enabling condition that ensures that future scenarios are imagined to be meaningful and relevant so that they can stimulate dialogue about possible future impacts on people, businesses, and society.

The second enabling condition is to set a common purpose as the foundation for any future-oriented activity. This empowers individuals to become the main actors in making the future happen. Clarifying expectations and outcomes for success is the third enabling condition. Establishing concrete goals and their dimensions enables teams and organizations to drive results and manage expectations. Thus, designing future scenarios can be an iterative process because setting future conditions is part of an activity that probes possible futures.

Although investigating the future is recognized as a fundamental action, many organizations experience tension in balancing the challenges of the present with the exploration of a vision for the future. Short-term results appear to be a dominant dimension in solving everyday tasks as opposed to building the enabling conditions for better results in the future. This is experienced in design, particularly in the challenge of balancing its present-focused operational nature with that of future-focused research and exploration of future scenarios (Martin, 2009). As the head of design operations of a MedTech company said:

One of the most important challenges in running projects about the future is building the enabling conditions for the future while delivering on the needs of today. Leadership should champion projects about the future. Their endorsement is a key enabler.

Achieving the proper balance between exploring new opportunities and working diligently to exploit existing capabilities is certainly one of the most discussed managerial challenges in today's innovation culture (Duncan, 1976; Tushman & O'Reilly, 1996). A key to addressing this obvious paradox, which is already present in the very nature of design and its leadership (Auernhammer & Roth, 2021; Randhawa et al., 2021), is to recognize how tension regarding the future is a fundamental element of a drive for change and thus of an organization's natural evolution (Corà et al., 2023; Gartenberg & Serafeim, 2022; Seligman et al., 2016).

In this paradigm, gathering signals to investigate possible futures becomes an explicit and strategic act that can inform the choice of one's desirable future and feed discussions with other stakeholders to evaluate issues such as feasibility, attractiveness, risks, and future conditions. In contrast, investigating the future requires continuous negotiation, as the head of design and research of a financial services company said:

To have the company's executive support in investing time and resources in initiatives that do not have an immediate ROI but are potentially very time displaced.

To enable the transition from the future as a cost to the future and as a driving perspective of the present, the leaders of a design function have an inclusive responsibility. They must spread a design culture throughout organizational silos by transforming collaborative opportunities into sensibilization opportunities to raise awareness of topics and processes, present possibilities, and prototype alternatives (Candy & Dunagan, 2017).

As the CEO and VP of innovation at a MedTech company pointed out:

If leaders are not trained in design issues, it is difficult for the structure to be organized in the right way to execute a strategy in which the design approach is critical.

6.2. Establishing Future Scenarios

A forecast is a prediction based on objective facts or experiences. A foresight is a vision based on forward-thinking informed by sensemaking. Fore-sighting provides techniques and tools for designing different future scenarios.

Unlike forecasting, foresight involves notions that the future is not predetermined and, therefore, cannot be predicted but can be influenced and, therefore, created (Minkkinen, 2019). Forecasts predict a future to adapt to; foresight envision futures that can be embraced and implemented. While traditional forecasting and strategic planning are future-oriented, experts have criticized their inadequacy in effectively managing the intricate, discontinuous, and swiftly changing nature of today's disruptive business environment (Buehring & Bishop, 2020). On the other hand, foresight (and designing future scenarios) embraces the complexity and uncertainty of the world and proves valuable in an ever-changing environment (Mountford & Christensen, 2022).

In approaching futures design, a useful first exercise is to set a time horizon. Defining a time horizon for each stakeholder will make it possible to frame and monitor a first-change measurement (Lindgren & Bandhold, 2009; Wright & Cairns, 2011). Historically, two distinct collaborative phases exist: one in which foresight investigates weak signals to inform possible visions of the future, and the second in which design shapes those visions of the future (Curry & Schultz, 2009).

This is especially true in methodologies such as the 2×2 scenario matrix (see **Figure 2**), which is a widely used approach to futures scenario design. The 2×2 scenario matrix was chosen mostly because it is quick and easy to use by untrained persons in small groups. In the 2×2 scenario matrix, a team repeats a process of divergence and convergence in which a series of future scenarios are hypothesized and chosen, starting from the knowledge of the present. A team usually, as in design thinking sessions, consists of cross-functional members of an organization with possible external guests (e.g., opinion and thought leaders and futurologists) acting as specialists or divergent elements (Buehring & Liedtka, 2018).

The selected scenarios are then prototyped into quick visualizations or three-dimensional representations that allow other members of the organization to be involved in evaluations and discussions by making the scenarios tangible. This role is usually entrusted to designers who, in creative elaboration, produce useful simulations and further develop concepts (Buchenau & Suri, 2000). Visualizations and prototypes can be realized in different ways: through visualization (e.g., images or illustrations), storytelling (e.g., comics, and videos), and immersive experiences (e.g., low-definition cardboard models of objects or environments, as in the service design mock-ups).

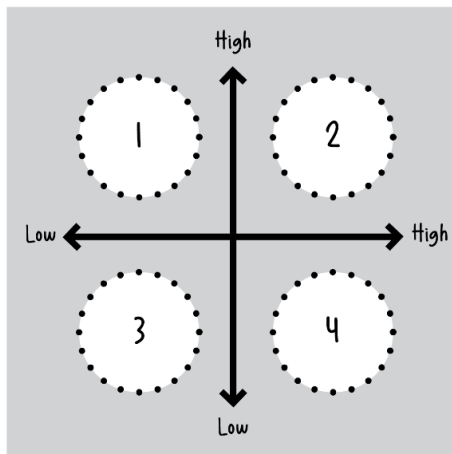
Exploring the future and discussing its consequences allows leaders, teams, and organizational stakeholders to investigate possible directions and evaluate the consequences of decisions. As the senior design executive of a packaging company put it:

Establishing an innovation process involves three stages:

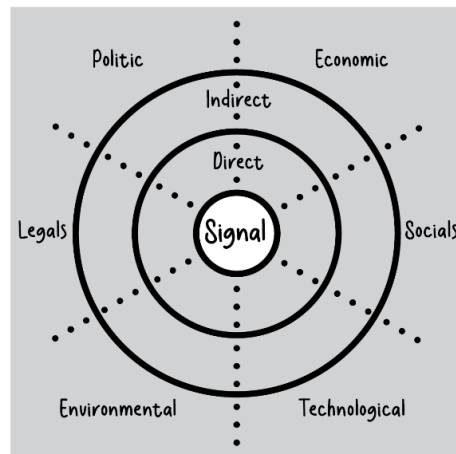
- **Future scenarios to understand the possible needs and opportunities for creating new solutions and/or new businesses;**
- **Prototypes of the future that foster dialogue with all stakeholders in a value chain, inside and outside a company; and**
- **Focus areas for innovation (disruptive, adjacent, or incremental).**

The following methodologies from **Figure 2** are intended to design future scenarios with deeper sensemaking to guide a research team in investigating possible futures with increased systemic research:

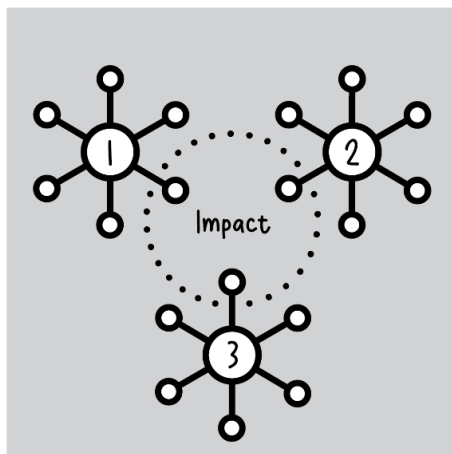
- The Futures Wheel is a speculative tool that helps people brainstorm the direct and indirect consequences of a decision, event, or trend (Glenn, 2009). It expands and evaluate the possible impacts of a signal according to the PESTEL analysis spectrum (Corà et al., 2023).
- Manoa, a method developed by Wendy Schultz in her work for the Hawaiian government in 1994, can also be described as the result of the intersection of multiple futures wheels (Curry & Schultz, 2009).
- Causal layered analysis, developed by Sohail Inayatullah in the early 2000s, guides a researcher to be immersed in understanding the deeper meanings of a signal and can be used to structure a new narrative that overcomes the systemic causes of the present (Ramos, 2003).



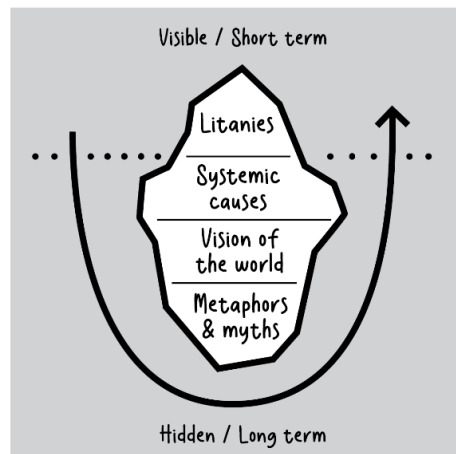
2x2 SCENARIO MATRIX



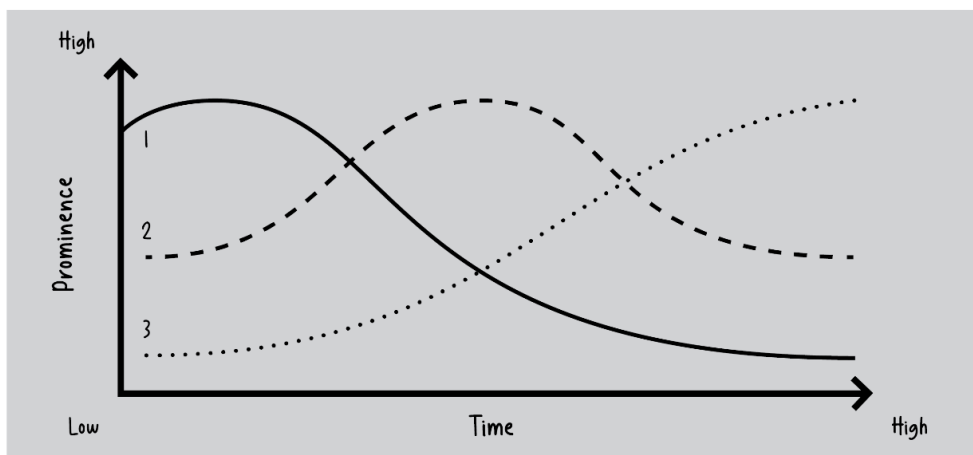
FUTURE WHEEL



MANOA



CLA (CAUSAL LAYERED ANALYSIS)



3 HORIZONS

Figure 2. Five different methodologies for designing future scenarios.

Another emerging and very comprehensive methodology visualized in [Figure 2](#) is that of the 3-Horizons, which is gaining ground, especially in the field of sustainability and social change investigations, due to its ability to enable investigations and representation of seemingly contrasting realities. The 3-Horizons methodology visualizes three timelines and their development in terms of time and prominence. The three timelines are the horizon of the dominant present, the horizon of an emerging future, and that of change, which identify an area of conflict between the other two horizons. This approach allows for an extended systemic analysis in which a team can conduct even very in-depth research from different realities represented and overcome obvious contradictions of volatile and ambiguous contexts (Curry & Hodgson, 2008; Sharpe et al., 2016). Figure 2 shows a visualization of the five methodologies previously described to design future scenarios.

Different methodologies can be embraced according to available resources and capabilities, time constraints, or the motivation to go deeper into a specific phase of a project, and when appropriate, these methodologies can be combined (Curry & Schultz, 2009). What emerged from the practice and study of the different methodologies is that foresight and design practices are in the process of discovering, learning from, and mixing with each other (Candy & Dunagan, 2017). Strategic foresight scans the environment for signals of change to anticipate their consequences. Design through sense-making scans the environment to create a shared map of the present to design an impactful, original, and useful future (Corà et al., 2023). The head of design of a financial services company said:

Some designers on our team need to think about future scenarios and not focus only on short-term results. It is an increasingly observed need and is particularly important for the loyalty of talent. The capabilities that feel more comfortable with future scenarios are business designers, service designers, researchers, and experience designers.

This is why we describe the two previously defined phases of futures scenario design as follows: Foresight, and scenario making as two phases of a single forward-looking design process.

6.3. Evaluating Desirable Futures

According to Inayatullah (2012), future scenarios are explorations of possible and plausible future trajectories that consider multiple layers of causality, values, and perspectives. These scenarios aim to challenge conventional wisdom, uncover hidden assumptions, and provide a more holistic understanding of the forces shaping the future. In other words, projecting forward and then backward – from tomorrow to today instead of today to tomorrow – liberates innovation from biases and fosters design’s full potential.

Contemplating future scenarios is an effective way to explore desirable futures and, from there, shape preferred scenarios for the future. These tangible and often visualized future scenarios are a great way to start conversations with all key stakeholders involved to evaluate topics such as feasibility, attractiveness, risks, and future conditions (Buehring & Liedtka, 2018). Futures scenario design thus enables feedback from opinion leaders, policymakers, and business leaders, creating the possibility of assessing the consequences of a desirable future in which all people and competences can be represented. As the head of design operations of a MedTech company said:

By making the future tangible, designers can facilitate the necessary discussions about the future to make it happen. This cocreation process is inclusive and ensures a commitment from all to contribute.

This process helps increase transparency, consensus, and shared belonging and ultimately informs the creation of an opportunity space. The opportunity space, which represents multiple possible solutions, exists where selected scenarios align with an organization’s purpose and strategy. Thus, each organization can choose the future scenarios to aspire to and then plan backward to achieve them (Dreborg, 1996; Quist & Vergragt, 2006). The head of design of a financial services company summarized:

Aligning future-oriented projects with the organization’s overall strategic objectives is vital.

The first step in opportunity discovery and strategy planning is selecting the most desirable scenarios. In addition to looking for internal and external consistency with all key stakeholders involved, leaders can evaluate and rate scenarios based on desirability, alignment with purpose, and impact. According to many respondents in our study, the criteria for evaluating the opportunity space of future projects must always consider the impact on the environment, people, and

society. This means assessing how possible responses to each opportunity create shared value for all stakeholders. The SVP of marketing and innovation of a manufacturing company said:

The lesson we have learned all these years is that there will be no ‘solo fight’ in the future. All businesses will have to cross-collaborate with different competencies to achieve the same vision. There will no longer be a ‘one shop does it all’ company!

6.4. Exciting People’s Motivation

Beyond individual specifics, most people want to do something good for someone else. Therefore, it becomes easier to see how this can extend to colleagues, customers, and all stakeholders within the organization’s orbit (Joly & Lambert, 2021).

A clear purpose with a collective meaning is the foundation for taking ownership of a shared vision (a desirable future) and taking action. The design function and its leaders play the role of bringing main stakeholders together as part of the overall process of designing the future and facilitating possible implementation. Imagining the future can initiate discussions about the future, which can drive change, as stated by the CEO and VP of Innovation of a MedTech company:

Cultural change and the creation and dissemination of a ‘mindset’ ready to explore and discover.

As the head of design of a home appliances company said, the greatest challenges of projects about the future are:

Making the difference between possible and plausible and gathering budgets and consensus to structure a roadmap and a continuous flow of exploration and testing.

This implies identifying the steps that enable a transition from a future situation to a present one, and vice versa.

The technique of future backcasting is one of the most widely used approaches for this purpose. Having understood the current state and defined the desirable future state, one works backward to identify the main events, decisions, and requirements that could generate that vision of the future from today. Backcasting is highly effective because it allows a team to move in a clear and shared context (start point and end point) and harness collective intelligence (i.e., organizational culture) to determine enabling intermediate requirements (Joly & Lambert, 2021). This activity enables shared project milestones, creates partnerships, and substantiates a path to the future.

In a world of action, first, mapping an unfamiliar situation becomes an essential element of sensemaking and leadership that enables all members of a team to work toward coordinated action (Ancona, 2012). As the chief executive officer of a furniture company said:

We have learned from the past that we need to look at what we have explored and what we plan to do with many more people.

Empathy plays a key role in this process, enabling us to sympathize with the thoughts and moods of others, whereas “others” can also mean ourselves in the future (Seligman et al., 2016). Empathy is a key part of a human’s learning capacity, as naturally practiced by designers, which is necessary for both accurate and efficient prospecting and for instantly translating representations of desirable futures into actions. Therefore, imagination, prospecting, and empathy are embedded human abilities that, if systematically applied by organizational leaders, can foster thinking about desirable futures (Corà et al., 2023).

7. Design Leadership Behaviors

The role of the design leader in designing the future is to guide and enable the collaboration needed to create future scenarios. On the one hand, the design team and the project need appropriate leadership to align and achieve agreed-upon outcomes, while on the other hand, the engagement and active involvement of key stakeholders are needed to excite and inspire people’s motivation to follow up.

The importance of strong design leadership was emphasized by the head of design at a financial services company:

The role of design leadership is crucial in striking a balance, with a primary focus on design excellence versus setting the vision, driving innovation, and fostering collaboration. This approach is essential for achieving

successful outcomes that not only meet user needs but also align with the organization’s strategic goals across all time horizons.

In an increasingly complex environment, where conflicting interests must often be managed, the role of a design leader can be challenging. As a result, this can create tensions, with the risk that design leaders will become less effective. Five opposing pairs of design leadership behaviors have been used that, when balanced, will result in effective design leadership while scaling design to excellence driving transformation and progress towards more desirable futures. (Quint et al., 2022).

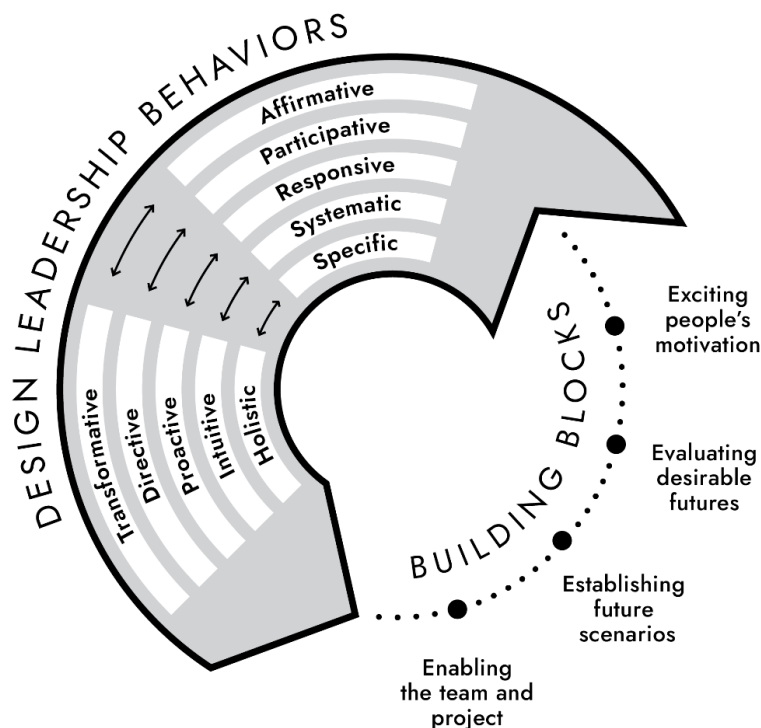


Figure 3. Five pairs of opposing design leadership behaviors (Quint et al., 2022) in an ever-present force guiding four building blocks.

7.1. Leadership Behavior When Designing Futures

Designing futures is related to scaling toward design excellence, from tactical to strategic design. In the context of designing futures, a design leadership approach that is situational and adaptive to given circumstances is required. The role of design leadership, through its behaviors, can be the ever-present force that facilitates the transition between the four building blocks in designing futures (see Figure 3). The following paragraphs describe how these leadership behaviors relate to designing futures through the lens of the senior design and innovation leaders in our study.

7.2. Transformative Versus Affirmative Design Leadership Behavior

In driving innovation and change, design leaders demonstrate *transformative* behavior as they push organizational boundaries and expand technical capabilities. When creating future scenarios, an attitude of challenging the status quo is a prerequisite for exploring potential scenarios that lead to long-term progress for the organization and/or society. Often, the design leader must initiate future initiatives based on a vision of that future, or as stated by an electronic retailer’s chief innovation officer:

Predicting the future and identifying the right projects for the future is a skillful task. Design leadership plays a vital role in identifying and executing these projects.

On the other hand, the design leader needs to recognize what works well and must be *affirmative* to scenarios that resonate and are feasible. In the evaluation of desirable scenarios and exciting people's motivation to follow up, opportunities will need to be identified for possible fit. Arguments must have to be shared to motivate people and their organizations to accept the challenge of owning and realizing desirable future scenarios. The design leader will fulfill the role of challenging yet accommodating future opportunities. The following was stated by the head of experience design of a home appliances company:

It is important to be on par with other functions; a design leader is a component that contributes with their skills, but these alone are not enough to be a successful visionary entrepreneur. However, when 'connecting the dots,' i.e., creating a vision of the future by drawing on different expertise, the design leader will be able to play a role that is not covered today.

7.3. Directive Versus Participative Design Leadership Behavior

To set successful boundaries for future projects, visionary and forward-thinking leadership is needed to define future ambitions and purposes for the organization. This is accompanied by *directive* and fearless leadership. Or, as shared by a tool manufacturer's VP of experience design:

Strong design leadership is needed to withstand the initial resistance to challenging the status quo and become the lighthouse for the entire organization. Of course, every vision needs to have a strong 'WHY'. This is the design leader's responsibility to provide.

However, once future scenarios are established, more *participative* leadership is appropriate for engaging with key stakeholders and sharing exciting outcomes related to the visions of the future created. Key stakeholders' involvement and follow-up need to be accommodated facilitatively, including building bridges with potential internal and external partners. The head of advanced design of an aerospace company stated:

Design plays a mediation role, helping the business find the right balance between all stakeholders. The importance of designs' ability to find this balance and create a narrative around it cannot be underestimated. Clear design leadership is not only desirable but also essential if real value is to be created.

Design leadership is not only in the role of setting a future direction but also instrumental in building bridges with potential partners to successfully follow up on future scenarios.

7.4. Proactive Versus Responsive Design Leadership Behavior

Rarely is a clear brief for a future project available, although a design leader's vision and imagination can help create the scope of such a project. A *proactive* design leadership approach will encourage future thinking and the creation of scenarios for evaluation. It requires courageous leadership to be an "intrapreneur," proactively driving future projects that will take the organization out of its comfort zone.

The head of consumer healthcare from a pharmaceutical company mentioned the resistance to change that comes with it:

Leaders must be able to see beyond the success of the moment to build future success. Overcoming resistance to change, you must have the courage to change when things are going well at a time when there would be no need to change.

However, design leaders must be *responsive* to their environments and ever-changing realities. The challenge of prioritizing short-term versus long-term business demands requires design leadership that is responsive and flexible. Opportunities often present themselves through the initiatives of other colleagues or unexpected opportunities from outside the organization. The chief creative director of a surfaces company shared the following:

Exploring the future is a choice. There are realities that do not invest in the future and yet are extremely reactive in adapting to the present, benefiting from not having used resources.

In this case, a design leader will act to drive new initiatives while appropriately capitalizing on existing opportunities.

7.5. *Intuitive Versus Systematic Design Leadership Behavior*

Designing futures is often based on elusive probabilities and predictions that are open to different interpretations. In the early stages of designing futures, there are limited proof points, and *intuitive* design leadership will build on the power of compelling storytelling, inspiring visualizations, and accumulated experience to drive progress. Design leadership is critical at this stage of a futures project, as shared by the head of design and research at a financial services company:

The ability to envision and develop experiences today that represent possible answers to future scenarios is unique to design. The ability to validate today's assumptions render a level of understanding that would be impossible without those visualizations.

In particular, when a futures project enters the evaluation phase, a more *systematic* approach may be required, using structured processes and methods to validate and prioritize preferable future scenarios. This approach will resonate with key stakeholders that are accustomed to speaking in terms of quantitative rather than qualitative data. The VP of experience design at a tool manufacturing company expressed the following:

Design can help visualize the future, make the intangible tangible, and connect with people both internally and externally on an emotional level. Therefore, strong design leadership is needed.

In this case, the design leader on the one hand has the role of an inspirer in the early part of a futures project, but is the one on the other hand who, through appropriate business acumen, connects with key stakeholders in the transition of scenarios later in the project.

7.6. *Holistic Versus Specific Design Leadership Behavior*

The mindset of a design leader while driving design futures is distinctive from that of delivering solutions for today's markets. A *holistic* mindset is needed that allows for big and bold thinking, challenges the status quo, and not get distracted by details. This approach offers the opportunity to explore new ventures and make unusual connections on a systemic level. Unlimited imagination will spark future scenarios of the widest variety. However, an organization needs to be aligned with the scope of a futures project. As the VP of experience design of a tool manufacturing company acknowledged:

When we talk about the future, it is important to define what we mean. Is it near, or far? Realistic or inspirational? Every version has its own value and role in defining the future and success of a company.

When future scenarios are generated and available for evaluation, a design leader needs to be more *specific* and pay attention to details. The way future scenarios are presented and communicated determines how they will engage with stakeholders who are expected to become the owners for follow-up. Empathy of designers is key to adapting future scenarios in a powerful and inspiring way. Details in designing these future experiences are essential for a successful follow-through of desirable future scenarios.

The head of advanced design of an aerospace company explained the role of visualizing the narrative as follows:

The role design plays can vary depending on the activity, but in general, design (in collaboration with other functions) will help create and visualize the narrative. Generating required concepts/directions and using a range of media, design joins the dots between tech, societal, and business elements to bring the future to life.

A design leader is now in the role of thinking through a wide lens to initiate the appropriate scenarios while being detailed in presenting and communicating future scenarios to connect the dots for follow-up.

8. Designing Futures

The five pairs of opposing design leadership behaviors must be thoughtfully balanced while guiding the four building blocks to generate future scenarios. They will enable design leaders to be effective and contextual to the different dynamics that a futures project entail. The variety of stakeholders, the phases of the project, the magnitude of the complexities, and organizational challenges will demand a design leader well versed in balancing for the best outcomes and inspiring a designed future that will become reality.

Figure 4 visualizes how ‘meaning’ is created as an activity starting from defining a purpose to imagine the future through sensemaking along with balancing five pairs of opposing design leadership behaviors while guiding the four building blocks described earlier.

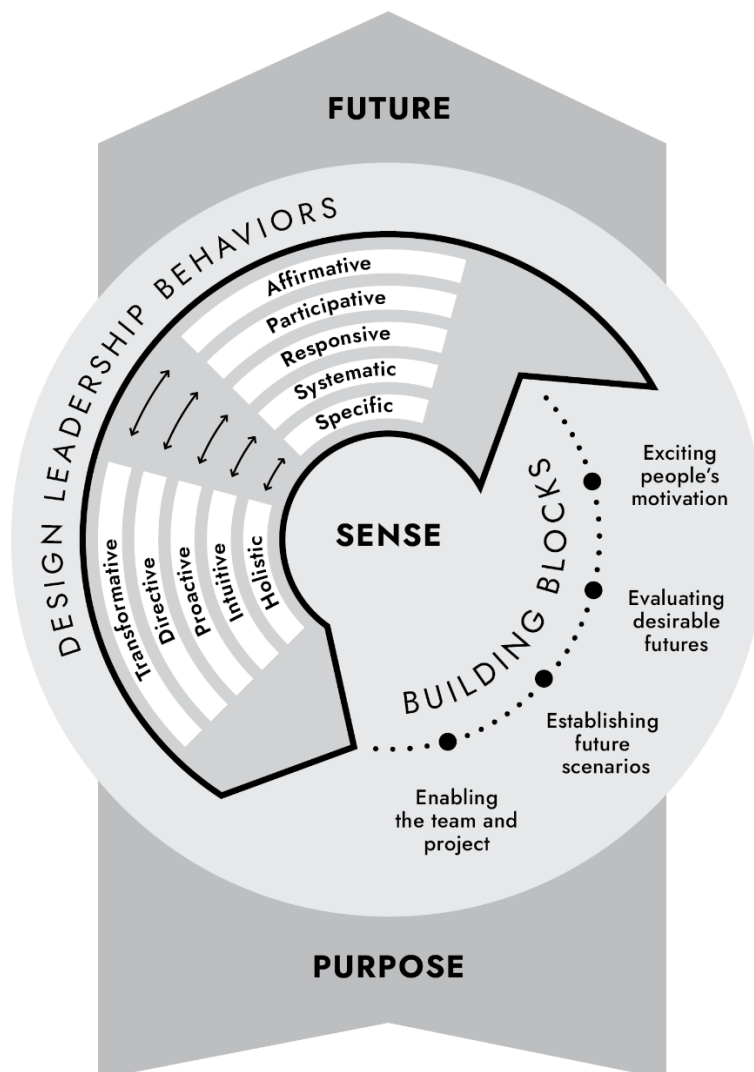


Figure 4. Five pairs of opposing design leadership behaviors (Quint et al., 2022) guiding four building blocks from purpose to future through sensemaking.

In this study, we identified two core activities, “imagining futures” and “leading futures,” that together result in “designing futures” (see **Figure 5**). We also elaborated on interactions across activities and the appropriate design

leadership needed for successfully designing desirable futures and guiding the following core activities: *imagining futures* is the activity of identifying and sharing a common purpose as the foundation for imagining futures through sensemaking; *leading futures* is where balanced leadership behaviors will become an ever-present force for effective design leadership across the four building blocks; and *designing futures* is the result of the above two activities combined, offering meaningful futures scenarios that are validated by main stakeholders to enable the realization of these scenarios.

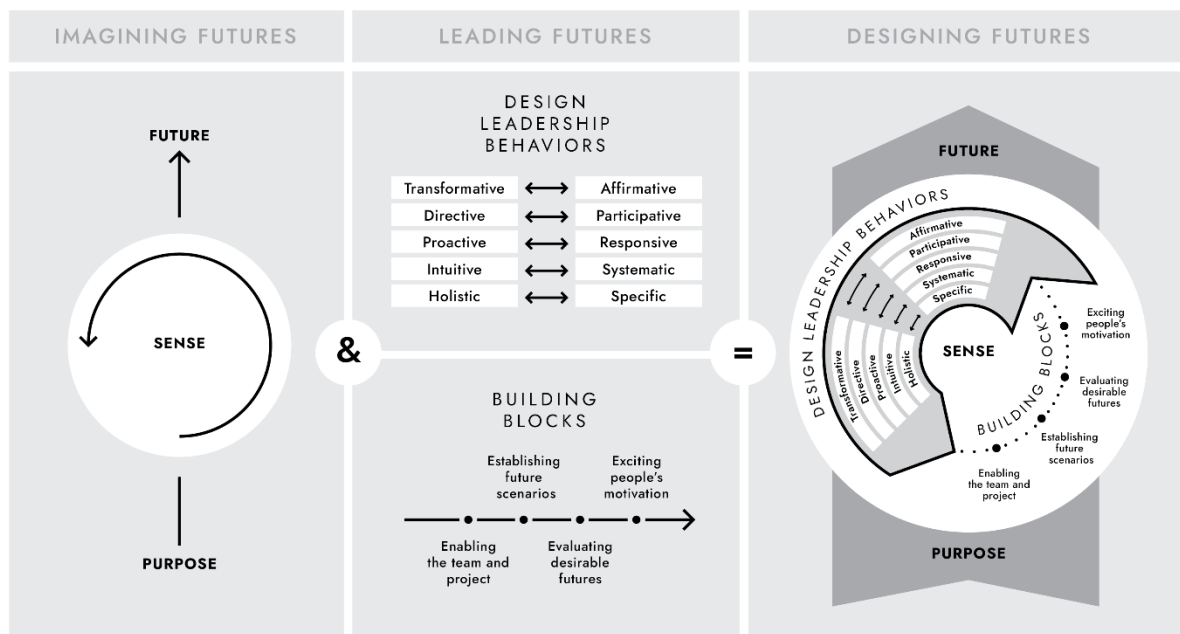


Figure 5. Two core activities, imagining futures and leading futures, resulting together in designing futures.

Designing the future will help build what is essential for driving transformation and motivate people to embrace the future. Ongoing curiosity about the future can activate learning and motivation that leads to shaping a roadmap toward a destination that is meaningful, relevant, sustainable, and, most importantly, driven by humanity.

9. Conclusion

In this study, we focused on the role of design leaders in designing futures and how they can effectively facilitate activities across the four identified and described building blocks of *enabling* a team and a project, *establishing* future scenarios, *evaluating* desirable futures, and *exciting* people’s motivation (see, [Figure 1](#)).

The journey of designing futures must be based on a common purpose to enable motivation toward a desirable future and give organizations the strength and determination to pursue their future goals. The leadership of an organization must articulate its purpose as a foundation and roadmap for designing futures. An organization’s ability to project itself into the future will be fueled by a desire to realize what it has imagined. Doing so requires understanding the ‘meaning’ that internal and external stakeholders’ value and share. As described in this study, sensemaking can offer a shared framework for learning and understanding an organization’s context and what is relevant and meaningful for people in the future.

A selection of different methodologies is described in this study for envisioning futures that can be utilized and even combined, depending on the scope (e.g., time horizon) and context of a futures project (see, [Figure 2](#)). In this process, the role of the design function and its leaders is to bring the main stakeholders together as part of designing futures and to facilitate partnerships that make desirable futures happen.

The often complex and conflicting interests of futures projects require balancing the five pairs of opposing behaviors of design leadership (see, [Figure 3](#) and [Figure 4](#)).

The two core activities, “imagining futures” and “leading futures,” were identified and described, which together will result in successful “designing futures” (see, [Figure 5](#)) with feasible and inspiring future scenarios that motivate key stakeholders to follow up.

The identified building blocks driven by design leadership from purpose to the future offer a framework for designing futures. As a practical implication, this framework will inform decision-makers and practitioners to drive projects about the future that are consistent with a common purpose and have a positive impact on people's motivation to implement.

A situational design leadership approach, where design leadership behaviors are continuously balanced, is recommended to enhance design leaders' ability to be more sensitive to ever-changing conditions and thus more effective while leading a futures project.

The importance of collaboration across all stakeholder groups during the process of designing futures is highlighted in this study. These stakeholders are represented by different types of organizations, such as for-profit, NGO's, governments and academic institutes, each with specific organizational characteristics. The combined research used for this study focused foremost on understanding the organizational context of for-profit organizations. This limitation could be addressed in future studies to anticipate better the characteristics and dynamics of all stakeholder organizations that are crucial to partnering within the effective creation and realization of desirable futures.

Artificial Intelligence (AI) is recognized and explored in the world of innovation rapidly. Some practitioners and leaders are considering generative AI as an accelerated design thinking process. In this case, AI is fed by social listening and clusters ideas based on best practices, running the risk of introducing biases. It is recommended to widen the scope of our study with an exploration of how AI could be instrumental in designing futures and the understanding of how social listening and social comments could drive future scenarios while addressing these possible biases.

To be better equipped for long-term success in a rapidly changing business environment, an organization needs to reflect on its relationship to the world in which it operates and integrate its external context with the internal culture. Designing futures enables opinion leaders, policymakers, and business leaders to provide feedback on desirable scenarios presented to them. This can stimulate dialogue about the possible consequences and feasibility of the desirable futures and may even inspire further enhancement of the presented future scenarios to drive future organizational transformation.

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