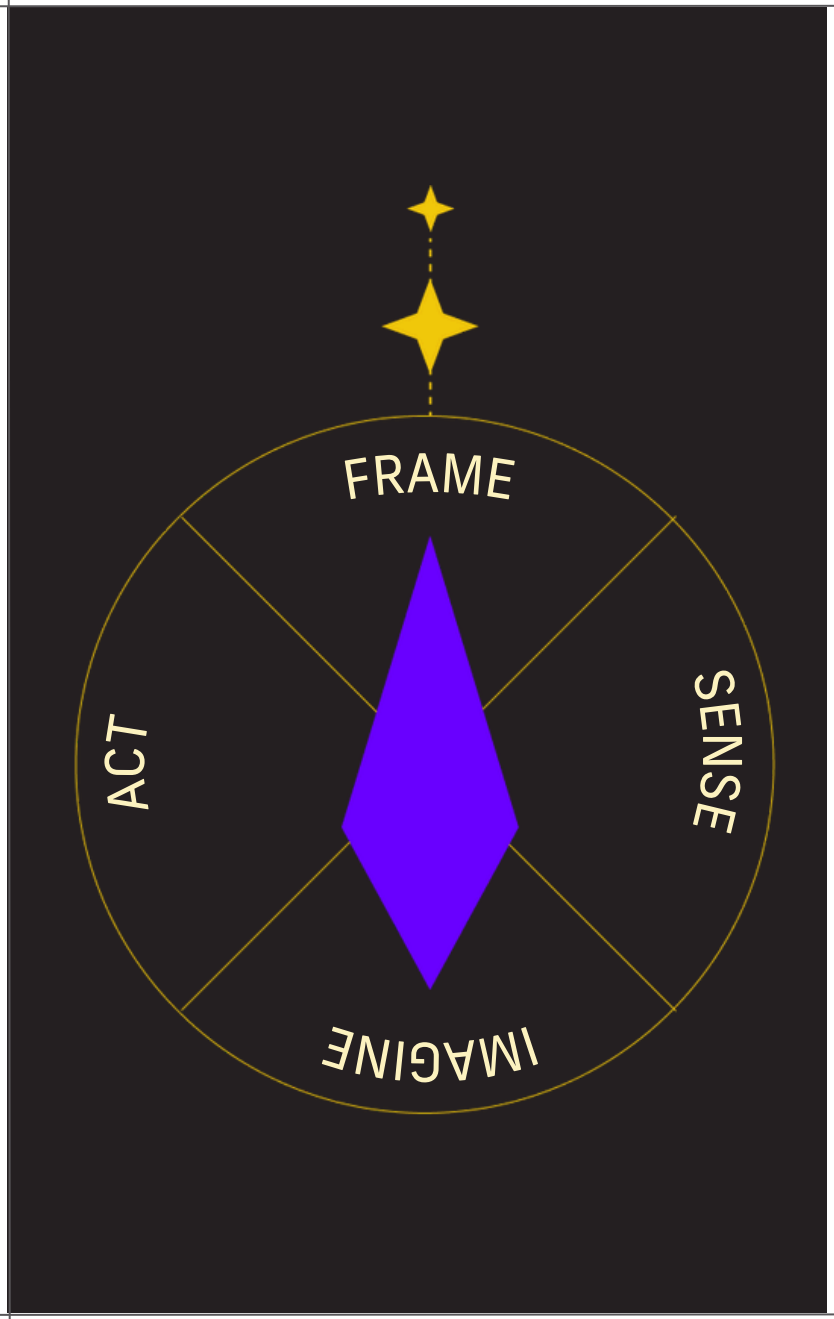

The Compass helps tackle complex problems by generating novel, actionable ideas.

Most business problems are systems problems – they have multiple interconnected parts that cannot be easily disassembled. The Compass guides you in navigating such problems, often helping you generate actions you might not have considered otherwise and avoid unintended consequences.

Much like a physical compass, you will use this Compass to tack through unknown terrain, guided by a North and Near Stars.

Get started by printing off these worksheets or using the template in Miro!

INNOVATION NORTH

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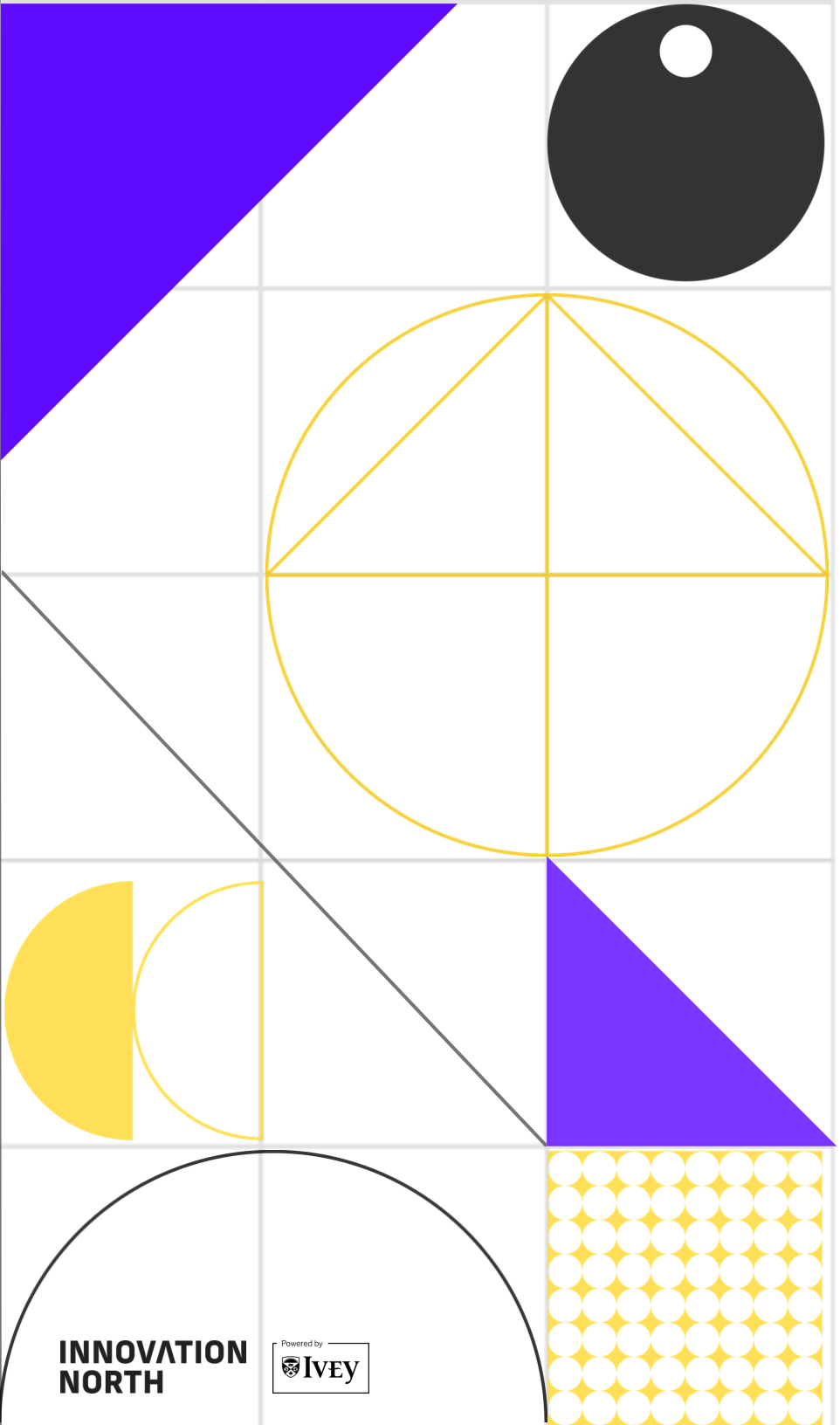

INNOVATION NORTH

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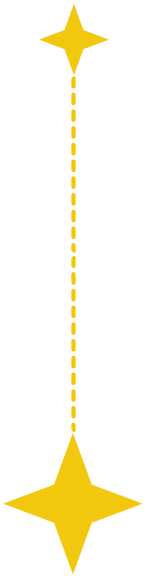
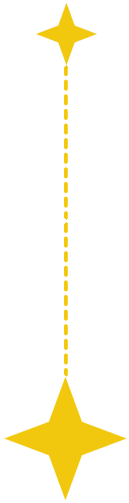


COMPASS WORKSHEETS

NORTH AND NEAR STARS

NORTH AND NEAR STARS

The North Star is your organization's long-term purpose. It is what the organization aspires to do – beyond profits. The Near Star is the project-specific goal that ensures all your team mates are aligned.



North Star: Write your organization's purpose, vision, or mission beyond profit.

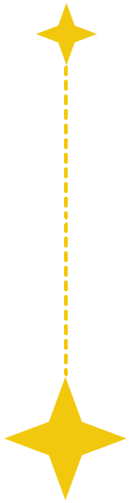
Near Star: Write your project's desired outcomes in terms that are observable or measurable, so you can monitor your progress.

NORTH AND NEAR STARS

CHECKLIST	WHY?
Align your Near Star with the North Star.	If your Near Star doesn't align with your North Star, you won't get full organizational buy-in for the project.
The Near Star can change; the North Star shouldn't.	Revise the Near Star as you learn, but keep checking to see it aligns with the North Star.
Align your project team	Check in with your team periodically on the project goals. It's easy to drift on complex projects.
Ensure progress toward the Near Star can be assessed.	Set indicators of progress in expressing your Near Star. You maintain momentum and excitement when you make good progress, and can pivot if you are making poor progress.
Focus on meaningful non-financial metrics.	Indicators of success for your Near Star should be non-financial. You know you are tackling a systems problem when the indicators are important not only to your organization, but others in the system.

NORTH AND NEAR STARS

The North Star is your organization's long-term purpose. It is what the organization aspires to do – beyond profits. The Near Star is the project-specific goal that ensures all your team mates are aligned.



North Star: Write your organization's purpose, vision, or mission beyond profit.

e.g. Meet customer needs, while contributing to healthy ecosystems

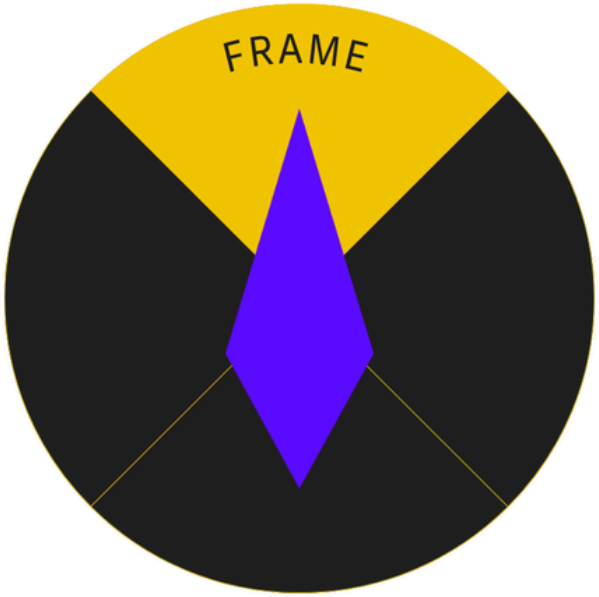
Near Star: Write your project's desired outcomes in terms that are observable or measurable, so you can monitor your progress.

e.g., Retailers sell products that stay in use for a long time.

You will want to keep revisiting this space, and possibly adjust it as you learn more about the system, problem, and develop your intended outcomes.

For example, after moving through the next practices, you may decide your near star is:

- *to reduce returns from 5% to 2%.*
- *to improve the percentage of products finding an alternative use (instead of going to landfills) from 15% to 50%.*



COMPASS WORKSHEETS

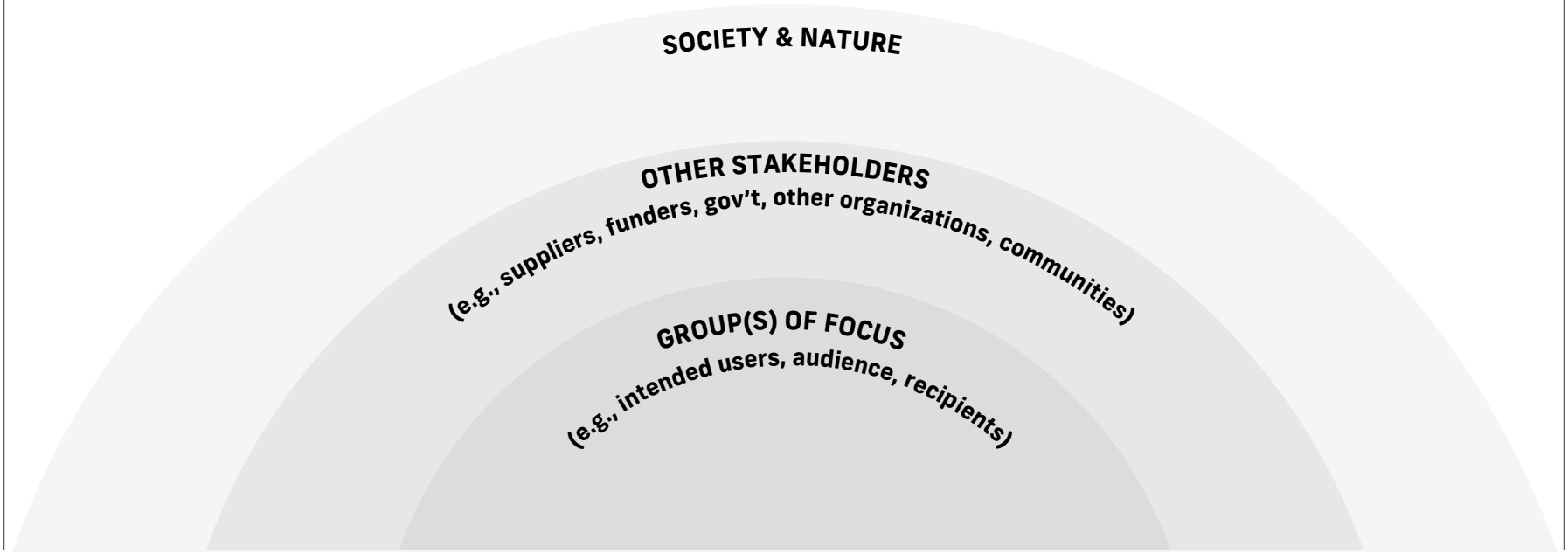
FRAME

FRAME

Here, you frame the problem that you want to tackle. How you frame the problem shapes the actions you take.

What is the problem that you want to tackle? To the extent possible, indicate how where you are now differs from where you want to be (i.e. Near Star). Try to be specific, such as identifying the target population, the geography, etc.

Describe the problem from different perspectives. Show how your problem affects different groups of people or nature.



	CHECKLIST	WHY?
○	**Frame the problem from your organization's perspective, not the systems perspective.**	Express a problem that your organization is facing, not a problem that the whole system is facing. "High product returns" is an organizational problem; "too much waste in society" is a systems problem.
○	**Keep the problem specific enough to be addressed.**	Express the problem so it is clear what needs to be addressed, and not in vague platitudes. For example, "too many product returns" is workable, but "our retail model is broken" means many things.
○	**Check that the problem is complex, not technical.**	Complex problems involve many people, parts, and have no clear answer. Technical problems are often engineering problems that can be solved with enough time, money, and expertise. They do not require the Compass.
○	**Don't hide the solution in the problem.**	Do not write the problem in the negative. "We lack a customer service system" offers an answer in disguise. Describe what is present and troubling, e.g. "rising returns, customer service overwhelmed".
○	**Started with an idea? Find its problem.**	Many innovations begin with a solution. That's okay, but work backwards to frame the problem it solves. If you can't, even a strong idea won't stick.

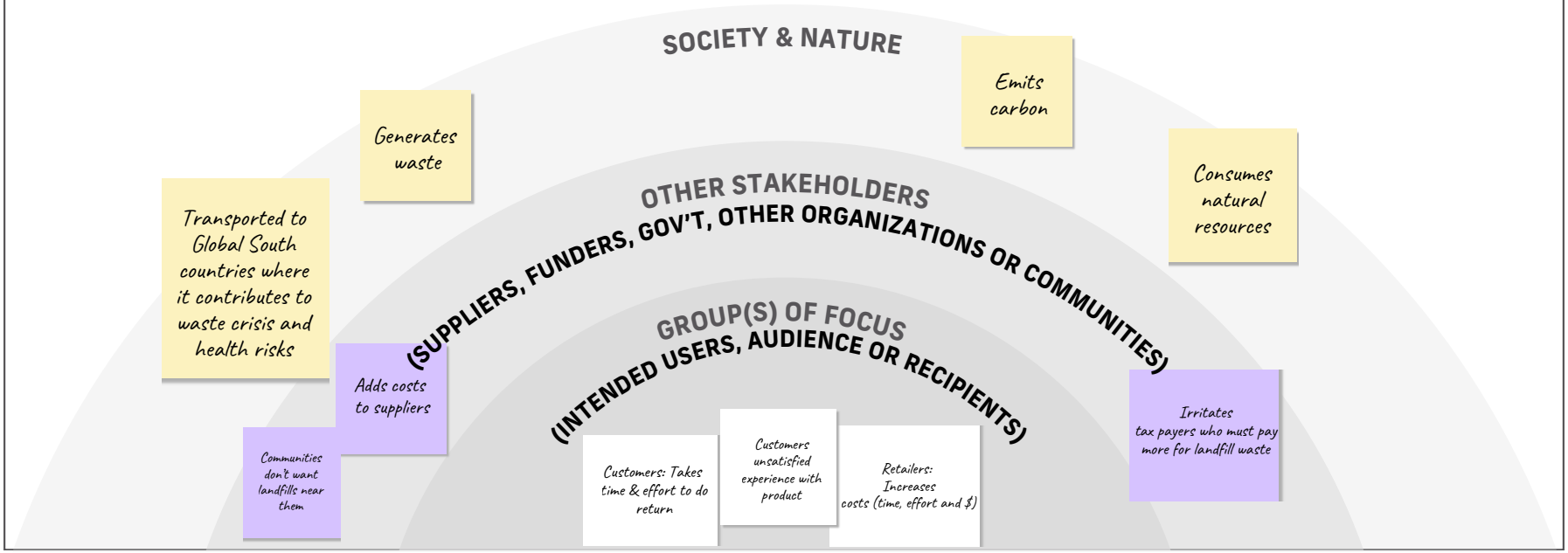
FRAME

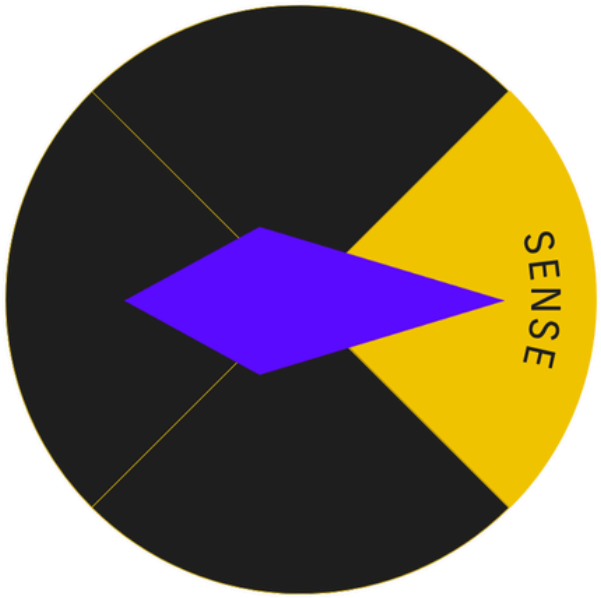
Here, you frame the problem that you want to tackle. How you frame the problem shapes the actions you take.

What is the problem that you want to tackle? To the extent possible, indicate how where you are now differs from where you want to be (i.e. Near Star). Try to be specific, such as identifying the target population, the geography, etc.

Approximately, 5% of products are returned and 85% of returned products end up in landfills. This is a problem because it is contributing to waste and filling up landfills, and increasing costs to retailers that get passed on to customers. How can we reduce product returns?

Describe the problem from different perspectives. Show how your problem affects different groups of people or nature.





COMPASS WORKSHEETS

SENSE

SENSE

In this practice you build an understanding of the system around your problem by listening to people who influence, experience, or are affected by the problem.

There are numerous ways to represent the system. We describe the way we draw the system, but you are invited to use whatever approach you think is best to suit the specific problem you are framing. Here are the steps.

- **Identify key actors and activities:** Draw boxes around relevant actors and their activities (e.g. "manufacturer produces goods").
- **Connect boxes:** Draw arrows among boxes to illustrate the flow of goods, services, information, money, etc.
- **Simplify the Map**: Remove information that is not related to the problem. Your map should be simple and easy to understand.

Collect emerging ideas here

CHECKLIST	WHY?
Go to where the problem lives.	Reports and desk research aren't enough on their own. Spend time where the problem shows up, and listen to the people who experience it, shape it, or respond to it every day.
Seek voices that shift your thinking.	Consult the usual suspects, but search for people whose perspectives are often missing (e.g., marginalized, a competitor's supplier, future generations, the natural environment). You do not need to consult everyone; instead, focus on getting a range of diverse views.
Build your visual with others, not alone.	Show your visual to others in your organization and potentially those in the system that you consulted to ensure that you haven't missed or misrepresented anything critical.
Keep it simple enough to explain.	Start by casting your net wide, then cut hard. Someone seeing your visual for the first time should be able to interpret it in 2-3 minutes. Be ruthless in removing anything that doesn't help illustrate the problem.
Stop when it's good enough.	Stop when it's good enough to act on. Your visual representation will never be complete or perfect. Move on when you have some unique ideas to action and then return and revise once you learn more about the system.

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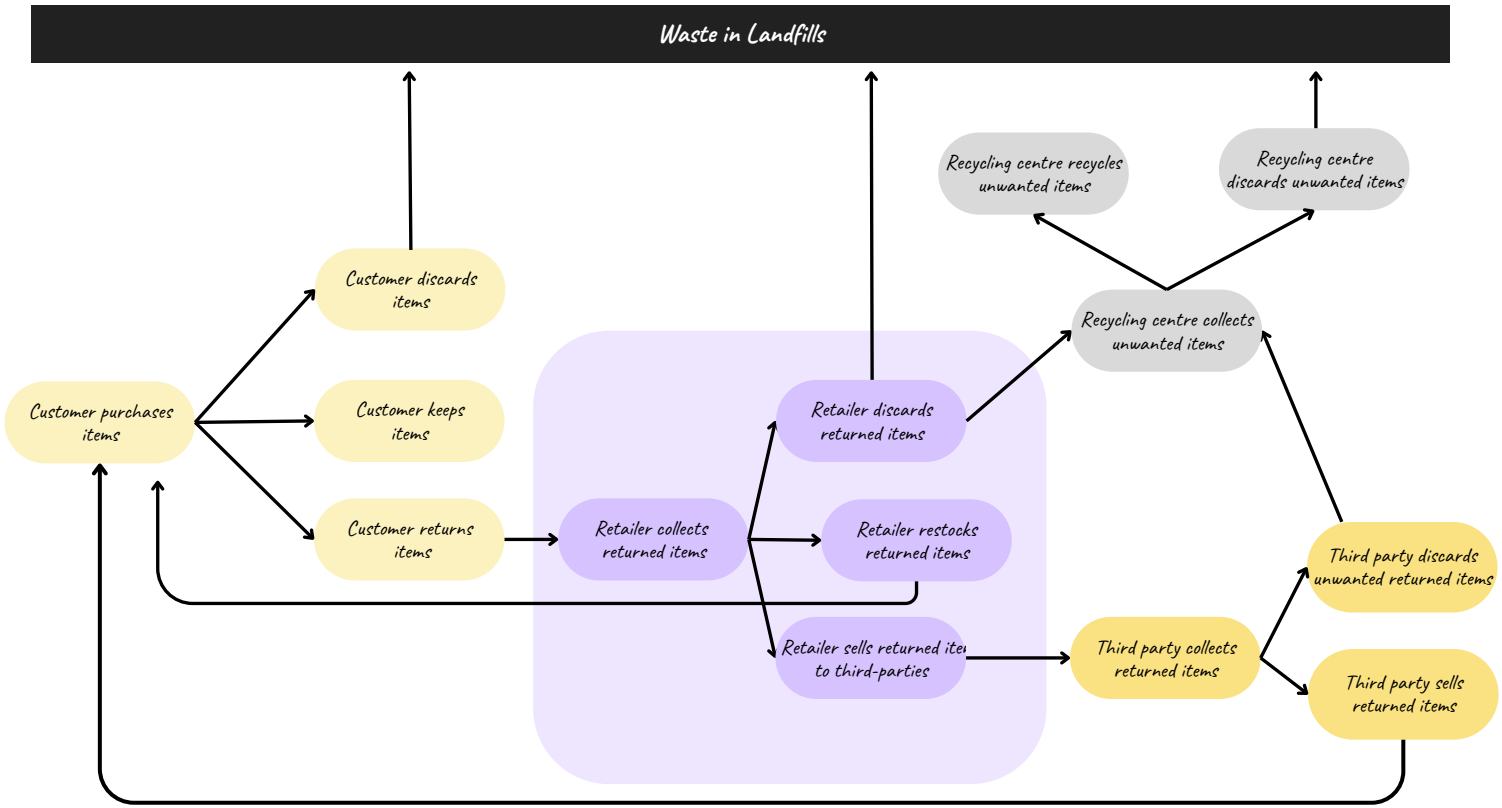

SENSE

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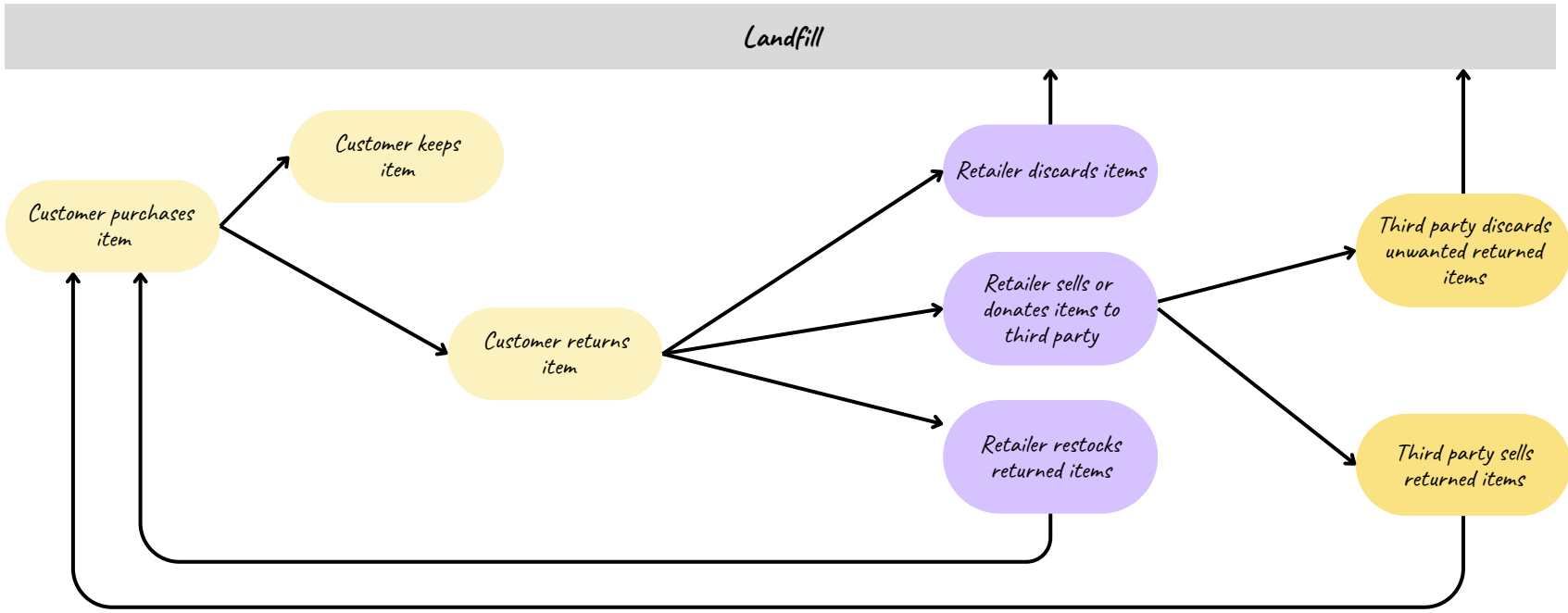

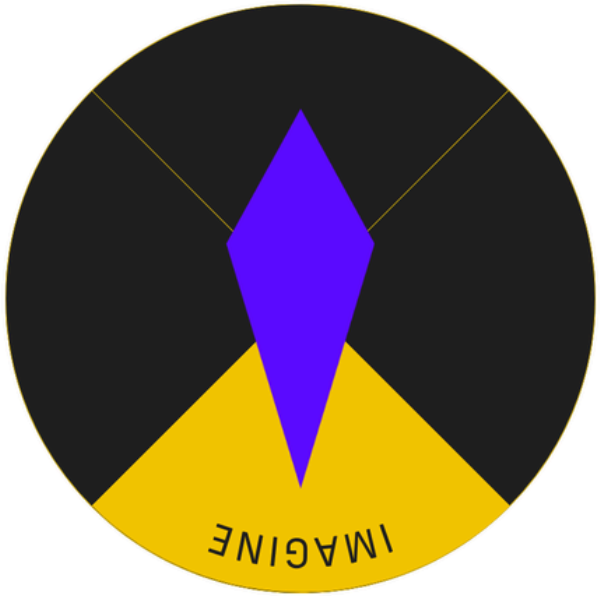

COMPASS WORKSHEETS

IMAGINE

IMAGINE

Here you imagine bold ideas. Ensure that you focus on ideas that your organization can actually implement, not ones that requires others to enact.

Brainstorm ideas: Use sticky notes and write one idea per sticky note. Be creative and don't filter.
Filter ideas: Once done, move the stickies with the most exciting ideas to the right. Adding notes can help you sort.

Clustering: Cluster ideas with other similar ideas. Give each cluster a short, summarizing title. Some clusters may have only one idea.

CHECKLIST	WHY?
Brainstorm with diverse others.	Start by writing down your own ideas, then see if you can assemble a group of people to help you extend these ideas. Bringing people together, especially people who are different from each other, can help surface ideas no one person can reach alone.
Be bold, not only incremental	Most brainstorming tends to stay with the familiar. Push your thinking by looking at other industries or contexts or even analogies.
Keep your organization as the actor.	Check the subject of each idea. If it starts with "government should" or "the industry needs to", rewrite it with your organization as the subject. Do not filter on feasibility; this comes later.

IMAGINE

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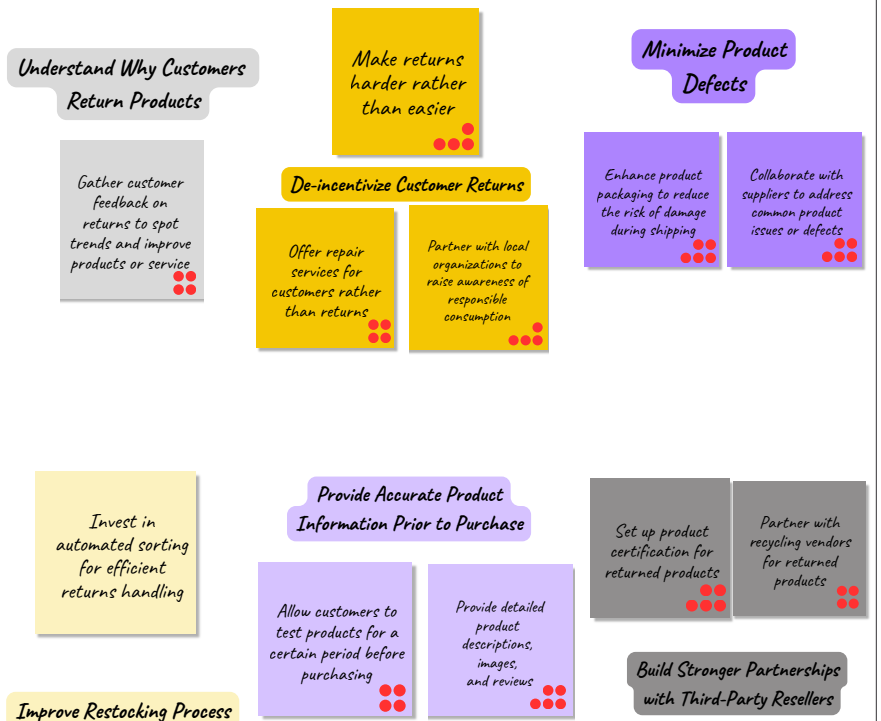
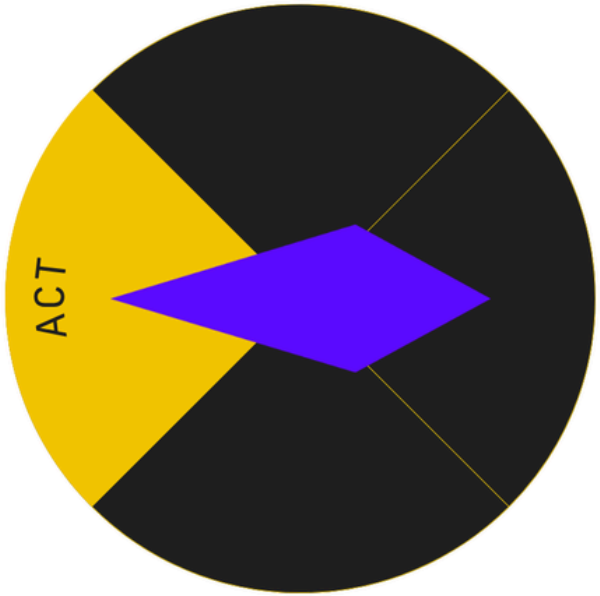




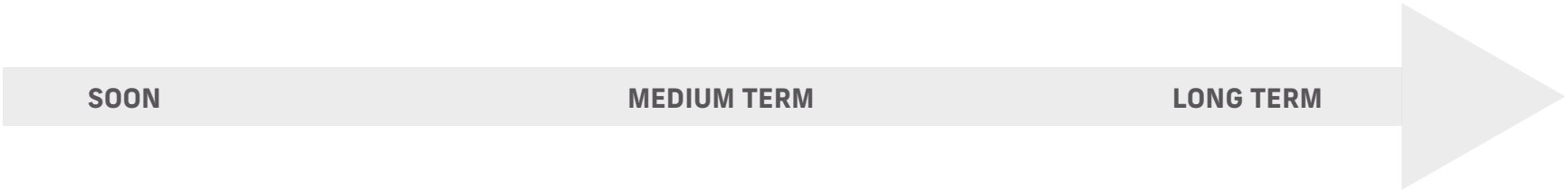
COMPASS WORKSHEETS

ACT

ACT

In this practice you build an ecology of actions: clusters of actions that support each other. Prioritize what you can start now, since early actions can create value and help shape later actions.

Map clusters of ideas: Place the cluster labels on the timeline below. Connect clusters of ideas with arrows, if they are contingent on each other.



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Rewrite the problem and the near star here to ensure that the actions help align them

ACT

Ecologies of actions: Take one or more of the clusters from above and identify who does what, by when, and with whom. You can connect actions that apply to more than one cluster with dots.

	IDEA CLUSTER 1	IDEA CLUSTER 2	IDEA CLUSTER 3
ACTOR 1	ACTION: WHAT, BY WHEN, WITH WHOM	ACTION: WHAT, BY WHEN, WITH WHOM	ACTION: WHAT, BY WHEN, WITH WHOM
ACTOR 2	ACTION: WHAT, BY WHEN, WITH WHOM	ACTION: WHAT, BY WHEN, WITH WHOM	ACTION: WHAT, BY WHEN, WITH WHOM
ACTOR 3	ACTION: WHAT, BY WHEN, WITH WHOM	ACTION: WHAT, BY WHEN, WITH WHOM	ACTION: WHAT, BY WHEN, WITH WHOM
ACTOR 4	ACTION: WHAT, BY WHEN, WITH WHOM	ACTION: WHAT, BY WHEN, WITH WHOM	ACTION: WHAT, BY WHEN, WITH WHOM

(Add additional rows as needed)

ACT

CHECKLIST	WHY?
Address the problem, not the symptoms.	Revisit the problem you framed and the visual of the system you sensed. Are the actions you are proposing addressing the problem and what has kept it in place?
Symbolic actions need substantive follow-ups.	Symbolic actions, such as a pledge, target, or announcement are useful short-term experiments. But, they need to be followed up with substantial actions in the near term.
Choose actions that help the organization and system.	If the action only helps the organization, then the project will revert to business as usual. If the action benefits only the system, it won't likely survive the budget review.
Do not seek silver bullets or moonshots.	It's better to develop an ecology of small actions, which can catalyze big changes. These tend to contribute to more resilient outcomes than big leaps, which often create unintended consequences.

ACT

In this practice you build an ecology of actions: clusters of actions that support each other. Prioritize what you can start now, since early actions can create value and help shape later actions.

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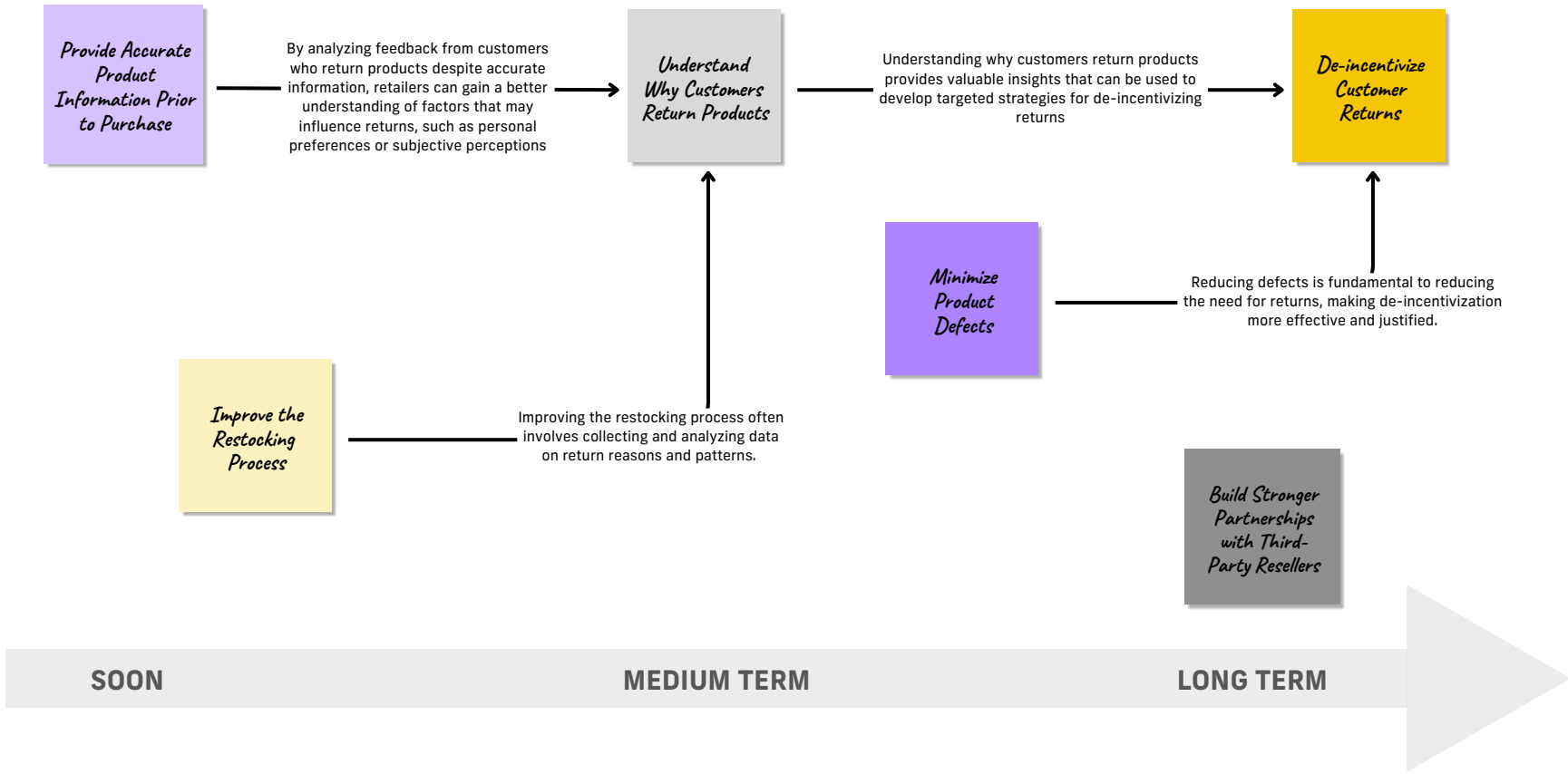
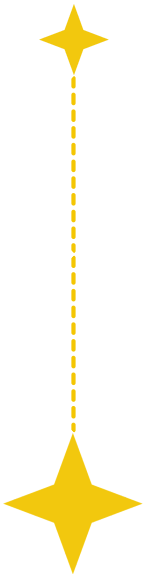


ACT

Ecologies of actions: Take one or more of the clusters from above and identify who does what, by when, and with whom. Use can connect actions that apply to more than one cluster with dots.

	Provide Accurate Information Prior to Purchase	Improve the Restocking Process	Understand Why Customers Return Products
Customer Service	Customer service will conduct surveys or interviews with customers to gather return insights within a month	Customer service will integrate real-time chat support on the website within one month, **in collaboration with IT**	Customer service will create guides in resolving issues with purchases within two months **with product development**
Operations & Inventory	Operations and inventory will implement barcode scanning for restocked items within six months, **with IT**	Operations and inventory will assess and streamline restocking procedures within two weeks	• • •
Product Development	Product development will create guides in resolving issues with their purchases within two months **with customer service**	Product development will identify the most common defects within two weeks, **with customer service**	• • •
• • •	• • •	• • •	• • •

(Add additional rows as needed)



DESCRIPTIONS

NORTH AND NEAR STARS

NORTH AND NEAR STARS

The **North Star** represents an organization's ultimate purpose, extending beyond profits to reflect the desired state for the wider system it operates within. It should inspire, unify, and guide employees, aligning their day-to-day efforts with the company's higher mission. The North Star should:

- Reflect the organization's value through its products and services
- Inspire employees with a goal beyond profits
- Motivate and center employees' day-to-day, yet remain aspirational throughout their careers
- Be specific enough to connect with, yet abstract enough to include everyone's efforts

The **Near Star** is a shorter or near-term goal tied to a specific innovation project. While the North Star remains steady, the Near Star can change and evolve – especially as projects reach maturation. Each Near Star moves the organization closer to its North Star and helps track progress.

MORE THAN MISSION STATEMENTS

Unlike mission or vision statements, the North Star goes beyond defining the organization's identity. It bridges the gap between corporate goals and world needs, aligning business actions with societal and environmental responsibility (Freeman, 1983; Mayer, 2021) while demonstrating how the organization is embedded within a larger system (Walsh et al., 2006).

CAN THE NORTH STAR CHANGE?

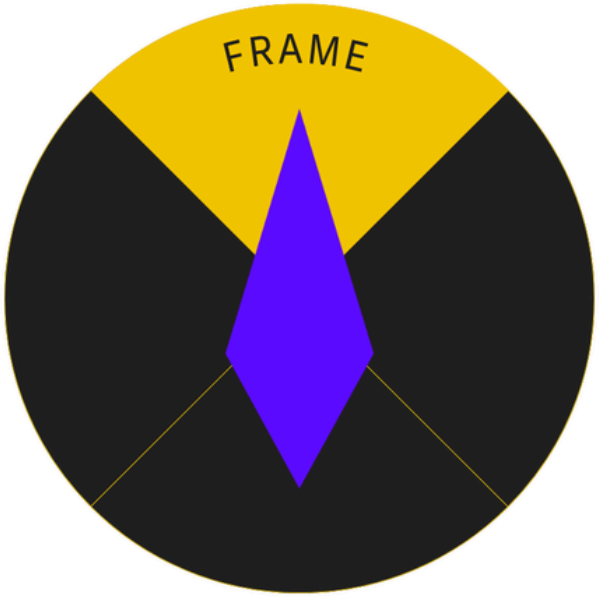
The North Star of an organization should remain relatively constant, as it brings coherence and stability to the organization's agenda. However, this does not mean it is unchangeable. The North Star can shift if the surrounding environment changes dramatically or if the organization's desired future evolves. Such changes do not happen frequently but may arise due to cultural shifts, changing societal needs, or abrupt shocks and disruptions, such as the COVID-19 pandemic.

WHY IS THE NORTH STAR IMPORTANT IN SYSTEMS INNOVATION?

During extreme uncertainty, firms often narrow their focus, becoming more egocentric and short-sighted as a way to feel in control. However, this can exacerbate crises, as executives need a broad perspective to navigate complex systems. The North Star helps firms combat this **limited perspective.**

In addition to creating a sense of unity and direction for employees, research by Innovation North team members (Lee et al., 2023) outlines three other specific benefits of a North Star:

1. **It exposes new insights that are often hidden from view.** Organizations often overlook issues like climate change because they lack a broad enough perspective to match its scale and pace. A clear purpose extends a firm's view spatially and temporally, enabling it to identify and address large, systemic issues.
2. **It helps firms filter information.** In uncertain environments, organizations are inundated with data. A corporate purpose helps organizations sift through noise and prioritize relevant information, preventing them from being overwhelmed by complexity.
3. **It sustains focus.** In times of extreme uncertainty, corporations can lose focus by chasing new trends or opportunities. A clear purpose helps maintain focus and consistency.



DESCRIPTIONS

FRAME

FRAME

A **problem** is the gap between where you are and where you want to be (Cyert & March, 1963; Senge, 1990). How you frame this gap shapes your understanding and influences the ideas and actions you explore. The same problem can present differently to various individuals and communities. A well-crafted problem statement will resonate with many people and communities, even if they view the problem differently.

VISUALIZING THE PROBLEM - THE RUBBER BAND METAPHOR

Imagine your current reality as one hand and your goal (Near Star) as the other. The distance between them is the problem. If the gap is too big, the "rubber band" snaps – symbolizing a crisis. No gap indicates complacency. The ideal stretch challenges but remains achievable, creating tension that drives progress. This gap provides creative tension – the source of energy driving you to learn, adapt, and move toward your vision (Senge, 1990).

THE COMPLEXITIES OF FRAMING PROBLEMS

Identifying a problem, especially a systems problem, is a complex task. Here are a few reasons why:

1. **Not Pre-Defined:** Problems don't exist on their own—they need framing and often, re-framing. This involves translating symptoms into a series of questions or alternative problem frames (Baer et al., 2013).
2. **Incomplete Information:** Problem framing often starts with incomplete information that can lead to uncertainties and assumptions. As new information emerges, reframing and adjusting the problem becomes necessary (Simon, 1977).
3. **Multiple Perspectives:** A systems-level problem impacts various stakeholders differently, making it crucial to incorporate diverse viewpoints, including the planet and future generations. When a systems problem is framed and viewed as a series of nested problems incorporating diverse stakeholder perspectives, it can generate more creative ideas.

The Risk of Jumping to Solutions

One out of four problems that undergoes a problem-solving process is never revisited for reformulation (Niederman & DeSanctis, 1995). This suggests organizations are more inclined to prematurely jump to solutions. Yet, framing and reframing the problem on an ongoing basis is crucial because the problem also shapes the ideas and actions for potential solutions.

FRAME

Early management theories often proposed that once an organization recognizes a problem, which may be signalled by a performance shortfall, it should jump directly into searching for a solution. However, jumping to solutions before framing the problem creates two main issues:

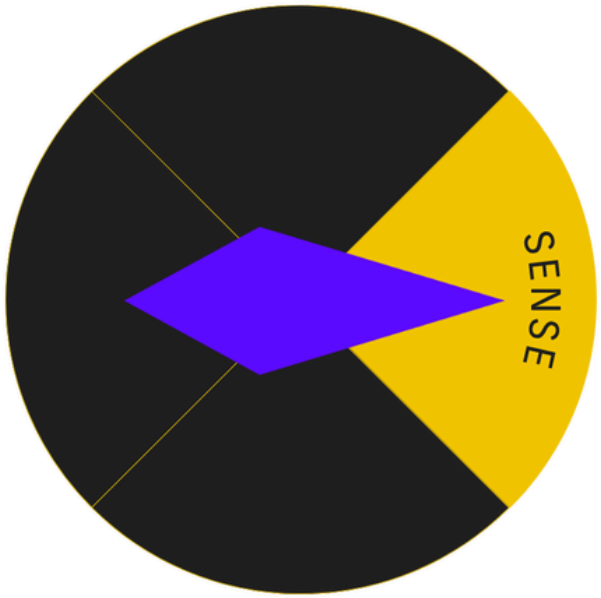
1. **Leads to Narrow Problem Definitions:** Research indicates that individuals tend to recognize only the most evident symptoms of problems, overlooking diverse perspectives and contextual factors to which they are less attuned. This leads to identifying simplistic or inaccurate problems (March & Simon, 1958).
2. **Limits Potential Solutions:** Organizations prioritize solutions that are proximate to their existing knowledge and practices (Cyert & March, 1963). By identifying a solution before fully understanding the problem, they might then try to frame the problem based on a preconceived notion of the solution (Duncker, 1945). This can hinder the organization's ability to discover truly innovative or more effective solutions.

PROBLEM AND SOLUTION AS ACTIVE ITERATION

The connection between problem and solution may seem linear, but in reality, problems and solutions co-evolve through an active, iterative process of framing and exploration.

This active iterative framing aligns with the pragmatist notion of reflective inquiry (Dewey, 1997; Wegener et al., 2023). Problem identification and solution development are not discrete phases but interwoven cycles of reflection and action that continually evolve in response to each other. Proposed solutions spawn new insights that redefine the problem (von Hippel, 2005), which then inspires adapted solutions, and so on (Dewey, 1997; Dimova & Kamarska, 2015).

The potential solutions that surface build greater awareness of the system, redefining the overarching problem space (von Hippel and Krogh, 2016).



DESCRIPTIONS

SENSE

SENSE

Sensing is the process of building an understanding of the system around your problem by listening to people who influence, experience, or are affected by the problem. Most of us only see parts of the system we interact with – so establishing a view of the entire system is vital. It can help you uncover parts of the system that would otherwise be missed, identify potential barriers that might hinder action, pinpoint enablers capable of removing barriers or scaling actions, and spark new ideas that could address the problem.

WHAT IS A SYSTEMS MAP?

A systems map is a visual tool that illustrates the key elements, actors, and interactions within a complex system. It reveals how different parts of the system connect and influence each other, highlighting barriers, opportunities, and leverage points. By mapping the system, you gain a more holistic view of the dynamics at play, making it easier to target interventions that address the root causes of issues, not just their symptoms.

WHY MAP SYSTEMS?

There are several reasons why mapping a system can help deepen your awareness:

1. **Diverse Perspectives:** Different actors see different parts of a system (Stacey et al., 2000). Mapping brings these perspectives together, creating a comprehensive view and revealing unseen connections and interdependencies.
2. **Identify Barriers:** Maps help uncover barriers, frictions, and pain points that might not be visible without a visual representation, guiding where interventions are needed.
3. **Understand Dynamics:** Visualization exposes system dynamics, such as feedback loops, delays, and nonlinear relationships, making it easier to understand complex interactions (Meadows, 2008; Sastry, 1997; Sterman, 2001).
4. **Pause for Insight:** The mapping process encourages slowing down to fully grasp the system before moving into ideation, ensuring solutions target underlying causes, not just symptoms.
5. **Reveal Leverage Points:** Small changes at critical points can lead to significant impacts (Meadows, 1999), helping you target strategic, effective interventions for sustainable change.

MAPPING PRINCIPLES

Innovation North has developed a process for systems mapping that draws inspiration from causal-loop diagrams, stock-and-flow diagrams, and other models (Lannon, n.d.; Sterman, 2001). You can learn about or try our approach in the Compass worksheets.

While you are welcome to try our approach, other mapping methods still have value and we encourage you to use the process that you are most comfortable with. Below is a list of best practices for systems mapping that can be considered regardless of method:

- **Focus on interactions, not root causes.** Rather than seeking direct causal relationships, try to emphasize how actors and activities influence each other within the system. In complex systems, direct cause-and-effect is rare, so focus on understanding the broader structure.
- **Process over outcome.** Mapping is a sense-making activity, so the process is more important than the final map. The map is a living document, continuously evolving as new information emerges. Elements are continuously added and subtracted to ensure that the awareness map remains useful and actionable. This iterative approach supports learning and adaptation.
- **Simple but not too simple.** The goal of mapping is to build an understanding of the whole system at a manageable level of complexity (Simon, 1976). Maps should be simple enough to make the system understandable, but complex enough to include all the important aspects relevant to your problem. Mapping requires us to both add information and subtract unnecessary or redundant information (Klotz, 2021) as we go to achieve an appropriate level of simplicity.
- **Focus on actors and their activities.** By recognizing the roles and activities of different stakeholders, the mapping process can inform underlying motivations and incentives that drive behaviours within the system. This insight is crucial for designing interventions that are both effective and aligned with the interests and capacities of those involved.

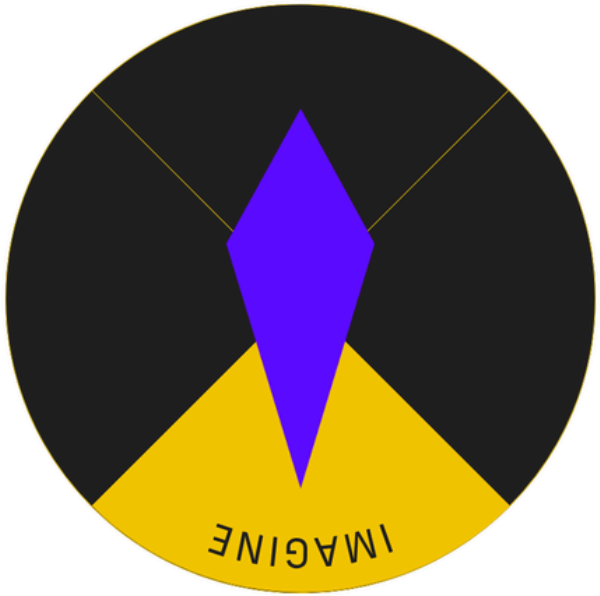
SENSE

- **Identify frictions.** A resilient, well-functioning system involves a series of flows – products, money, information, or even social relationships (Meadows, 2008). Sometimes, these flows are blocked causing problems and should ultimately be reduced or removed; other times, blockages actually function positively—where more friction leads to a better outcome.

PERSPECTIVE-TAKING AND DEEP LISTENING

Mapping systems requires gathering insights from various actors, especially those deeply embedded in the system and those with whom we do not regularly engage.The number and diversity of actors are also important, as it is only by bringing multiple perspectives together that a holistic understanding of the system emerges (Whiteman & Cooper, 2000, 2001; Stacey et al., 2000).

To really grasp another's perspective (Galinsky, Massux, Gilin, & White, 2008; Johnson, 1975), you must engage in deep listening. This requires being fully present and asking good questions (Brooks & John, 2018; Kluger & Itzchakov, 2022). Deep listening also requires the listener to let go of preconceived notions that may be outdated because systems are dynamic and are in a constant state of change (Holling, 2001). When engaging in deep listening, listen for signals related to the emerging future (Scharmer & Kaeufer, 2010).



DESCRIPTIONS

IMAGINE

IMAGINE

This practice involves identifying potential ideas to tackle the problem. Ideas often emerge informally, so be sure to keep track of them while going through the other practices of the Compass and also set aside dedicated time for formal ideation.

FORMAL IDEATION

Formal ideation refers to a more structured and deliberate process of generating ideas (Allen, 2015). This often involves organized sessions or workshops where a group gathers to brainstorm ideas around a specific topic or challenge.

Formal ideation sessions typically have a facilitator who guides the process by setting objectives and providing structure to the discussion. Participants are encouraged to build on each other's ideas and think creatively to generate innovative solutions.

Research shows that brainstorming is done more effectively in groups (Osborne, 1957; Singh & Fleming, 2010). While a few studies show that team processes can sometimes be inferior to individual processes (Diehl and Stroebe, 1987; Mullen et al., 1991), most agree that groups come up with more and better ideas than individuals, especially when the group is diverse and tackling complex real-world problems (Kavadias & Sommer, 2009; Sutton & Hargadon, 1996). Creativity comes from a blend of individual and collective ideation (Osborn, 1953).

INFORMAL IDEATION

Informal ideation occurs spontaneously and informally, often on an individual basis. It can happen at any time and place, such as in the shower, while commuting, or during a casual conversation.

Informal ideation is a relaxed, unstructured approach where ideas flow freely without pressure or specific constraints. This type of ideation is valuable because it allows individuals to explore a wide range of ideas without inhibition, leading to creative and truly innovative thinking.

IMAGINE

It's easy to assume that brainstorming only occurs during formal sessions but informal ideation is also very important. In reality, some of the most groundbreaking ideas can come from these informal, everyday moments of reflection and inspiration. Archimedes discovered the principle of buoyancy while taking a bath. He realized that the water displacement was related to the volume of the object submerged, leading to his famous exclamation, "Eureka!"

TIPS FOR IDEA GENERATION

IDEO is a renowned design and innovation firm known for its human-centred approach to creativity and problem-solving. Below are 7 simple rules for brainstorming that IDEO uses and we support in generating ideas:

1. **Be visual:** During live brainstorming sessions, jot down or draw ideas on Post-its and place them on a wall as you share them with the group. Nothing conveys an idea faster than a quick sketch. Don't worry about artistic perfection!
2. **Defer judgment:** Great ideas can come from anyone. Encourage everyone to share their thoughts and allow others to expand upon them without criticism. This helps create a psychologically safe environment, where team members feel valued and confident in contributing their ideas.
3. **Encourage wild ideas:** Unconventional ideas can lead to creative breakthroughs. Thinking outside the box allows for exploring possibilities without being constrained by current limitations.
4. **Build on the ideas of others:** Positively adding to others' ideas is a valuable skill. Use "and" instead of "but" to show support and further develop concepts.
5. **Strive for a large number of ideas:** In a productive session, up to 100 ideas can be generated in an hour. Generate ideas quickly and then refine the best ones.
6. **One conversation at a time:** Give full attention to whoever is sharing an idea. This focus helps the team build upon the idea and make creative connections.
7. **Stay focused on the topic:** Keep discussions on track to avoid straying beyond the scope of the design goals.

HOW TO SELECT GOOD IDEAS

Once you have a good list of ideas, it's time to narrow them down to the ones worth trying. But how do you pick the most promising ideas that will really tackle the problem? Research points to a few key things to consider:

IMAGINE

- **Novelty:** Novel ideas are original and paradigm-modifying– not only rare but also ingenious, imaginative, and surprising. They are often radical or transformational, challenging existing norms and offering fresh perspectives.
- **Workability:** Workable ideas are easily implementable and do not violate known constraints, being socially, legally, or politically acceptable.
- **Relevance:** Relevant ideas directly apply to the stated problem and are effective at solving it.
- **Specificity:** Specific ideas elaborate a clear relationship between the recommended action and the expected outcome, clarifying who, what, where, when, why, and how.

Another key factor to consider is whether the ideas generate energy and excitement among your team members, as energized teams tend to be more creative and maintain long-term momentum, leading to better outcomes for the organization.

When people are excited about an idea, it can enhance their cognitive flexibility, leading to more innovative solutions and approaches (Amabile et al., 2005; Fredrickson, 2001). Energized teams tend to be more creative as their positive mood broadens their thought-action repertoires.

Studies on motivation and engagement suggest that ideas that spark excitement can maintain momentum over time. The initial energy can help sustain interest and drive, which is crucial for long-term projects requiring continuous effort and dedication (Ryan and Deci, 2000).

OTHER PRINCIPLES TO KEEP IN MIND WHILE SELECTING IDEAS

- **Avoid ideators' bias in evaluating ideas:** Ideators' bias refers to the tendency for individuals, particularly those at higher organizational levels and in group settings, to favour ideas based on their origin rather than their merit. This bias can lead to the overlooking of potentially valuable ideas. To counter this bias, it is essential to evaluate ideas based on their value and alignment with the goals of the innovation process (Fuchs et al., 2019).

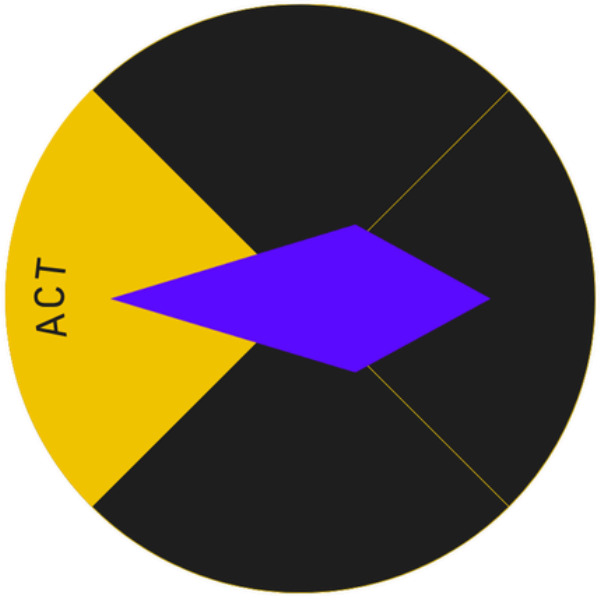
- **Forecast with a wide perspective:** Creators often limit their assessment of ideas by focusing on immediate possibilities, missing more innovative concepts. Forecasting with a broader perspective involves stepping back to consider wider implications and possibilities. Interestingly, ideas initially seen as the second best often turn out to be the best in the end (Berg, 2019).
- **Utilize your organizational structure:** While organizational structures can impede the free flow of ideas, they can play a beneficial role during the screening or selection phase of innovation. Hierarchical structures can provide the necessary framework for evaluating and prioritizing ideas, ensuring that those with the greatest potential are pursued further (Keum & See, 2017).

THE IMPORTANCE OF DIVERSE PERSPECTIVES

Diverse perspectives contribute to a more comprehensive understanding of complex systems and significantly boost group creativity. Research indicates that direct engagement with individuals holding different perspectives is crucial for innovators aiming to improve their idea-generation capabilities (Falk & Johnson, 1977; Grant & Berry, 2011; Hoever et al., 2012).

Direct collaborations with organizations in diverse fields are an effective strategy for generating innovative ideas (Perry-Smith & Mannucci, 2017). However, even when such collaborations are not feasible, it's crucial to involve individuals with diverse knowledge backgrounds (Björk, 2012) but from similar markets (Franke et al., 2014). These individuals not only contribute better ideas but also enhance the overall diversity of the group.

Effective brainstorming and problem-solving go beyond just having diverse voices; they also require perspective-taking (Hoever et al., 2012). This involves actively considering and integrating multiple viewpoints, leading to increased information sharing and fostering creative and cooperative team dynamics. Such dynamics are essential for addressing complex issues (Parker & Axtell, 2001).



DESCRIPTIONS

ACT

ACT

In this practice you build an ecology of actions: clusters of actions that support each other and move toward the Near Star. These actions don't control the system – they nudge it forward so the focus is on small, quick actions that actors can take immediately to work towards the long-term outcomes envisioned in imagining possibilities.

KEY CONCEPTS

- **Action:** Any step that impacts the system, often small nudges or experiments. Actions can range from small-scale feedback gathering to launching a pilot product or services.
- **Outcome:** The result of an action, which can be physical (such as a new product) or symbolic (such as shifts in identity or mission).
- **Emergence:** In complex systems, outcomes arise from the interactions of small actions. These may lead to ripple effects that reshape the system, though sometimes actions may meet resistance and produce no immediate change.

WHY SMALL ACTIONS ARE IMPORTANT IN SYSTEMS INNOVATION

No one can fully control complex systems, but we can influence change through small actions, or what we often call nudges (Valente, 2010). These actions allow people to adapt over time, leading to new patterns that shift the system's state.

For example, in a city like New York, individual decisions – whether choosing a subway line or where to eat lunch – interact to shape the broader system. Neighborhoods gentrify, trends spread, and businesses thrive or fail, all from the bottom up. These shifts aren't planned centrally but emerge from countless individual actions. Similarly, in systems innovation, small actions can have ripple effects, especially when interconnected with others' actions (Plowman et al., 2007).

Although we can't predict exactly how systems will change, we can experiment with actions that might create a ripple effect beyond our own organization. We then adjust based on the system's response, much like checking waypoints during a mountain expedition to reassess our route.

ACT

BUILDING AN ECOLOGY OF ACTIONS

Small actions give us flexibility, allowing us to pivot if necessary, always keeping the Near Star in sight but not being tied to one specific path. Small actions should be used to reduce friction and create pathways for bigger actions later. These smaller steps often happen simultaneously, forming an interconnected ecology of actions that support each other (Grewatsch et al, 2021).

Lift Frictions: Systems often resist change due to the interests of those invested in maintaining the status quo. Think about actions that reduce these barriers, like working with partners or policymakers who can facilitate change (Sutton and Rao, 2024). At other times, you may want to create friction. For example, adding friction to children's access to social media can improve mental health by reducing screen time and anxiety.

Celebrate and Learn: As you take action, share your successes to inspire and motivate others (Weick, 1984). This builds momentum through storytelling and helps others learn from your experience. Continuous reflection on both successes and challenges is key. It's not just about celebrating wins but learning from all actions—even those that don't go as planned. By learning and adjusting, you ensure future actions are more effective.

As you plan your actions, consider what steps can be taken now to ease future actions and what possibilities might open up from those efforts.

ZOOMING IN AND OUT

Changing systems requires looking at both near-term actions and long-term visions or what we call zooming in and out. This dual perspective helps us move forward in unpredictable systems. Anchoring actions around desired future outcomes keeps the focus on breaking free from the status quo, freeing us from current constraints (Quist and Vergragt, 2006). Starting with the future vision energizes teams and directs resources toward positive change (Kuhmonen, 2017).

ACT

While it's tempting to focus on immediate challenges, starting from the present can limit creativity and bog us down in current pain points (Kuhmonen, 2017). By focusing on the desired future, we can design actions that push us toward that future, using specific actions to overcome barriers as we go.

Imagining the desired future energizes teams while planning near-term actions creates a sense of agency. Executing these actions and celebrating small wins along the way, can boost momentum and keep everyone engaged in the process.

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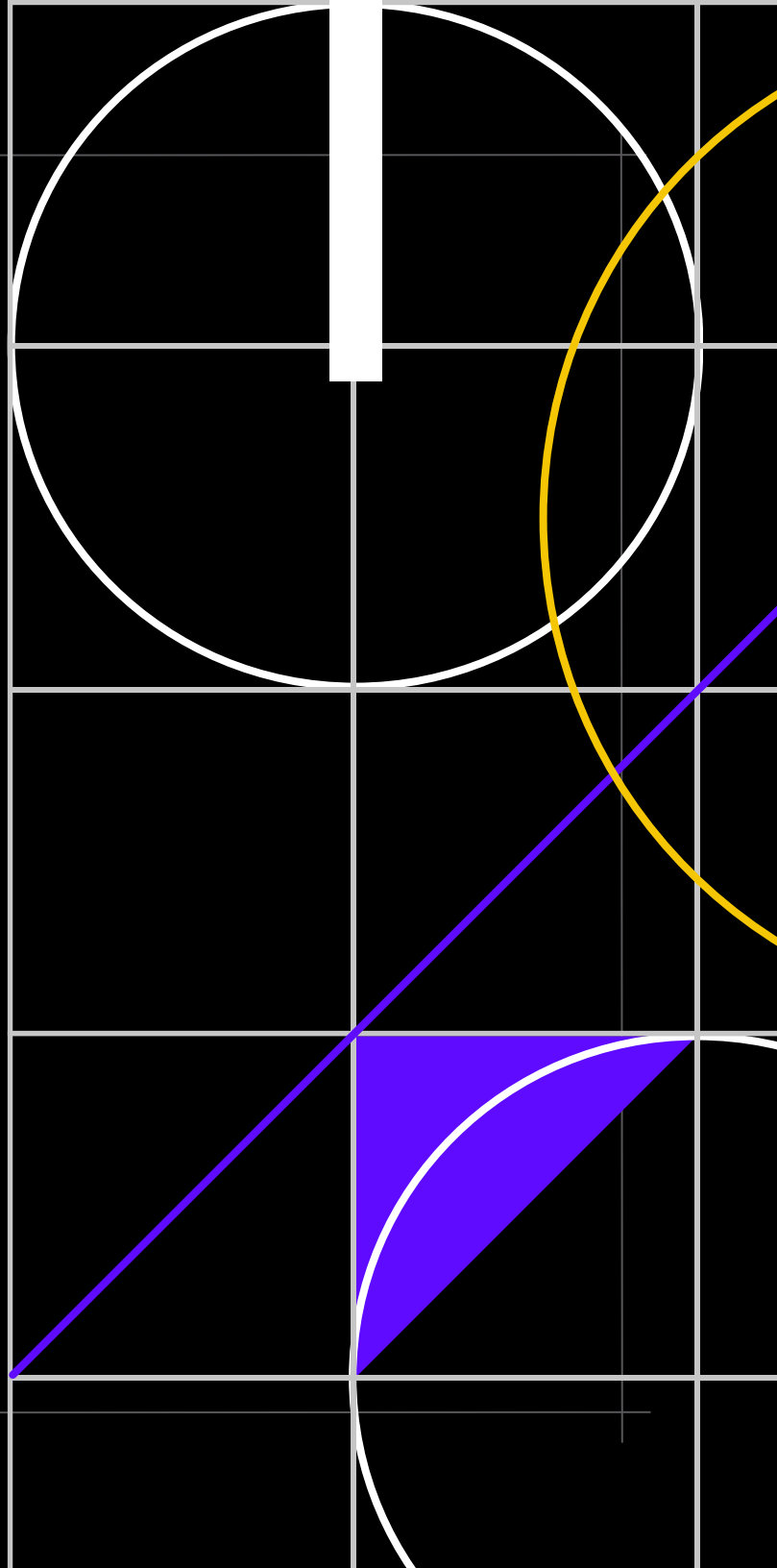

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