

Facilitator's Guide



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FUTUREScape LIBRARIES: A TOOLKIT FOR LIBRARY LEADERS NAVIGATING THE FUTURE OF AI

In an era marked by accelerating technological, societal, and geopolitical shifts, today's decisions shape tomorrow's realities in increasingly unpredictable ways. For leaders in research and university libraries, this means grappling with uncertainty not as a short-term hurdle but as a permanent feature of the strategic landscape.

Foresight—the ability to anticipate change, consider multiple possible futures, and act with agility—is a critical leadership skill. It expands our thinking beyond immediate pressures and singular forecasts, encouraging more imaginative, inclusive, and adaptive planning. Futures thinking is not about predicting what will happen. Instead, it prepares us to make more resilient and intentional decisions by asking: “What could happen? What should happen? And what will we do now to shape a better future?”

This toolkit is designed to help library leaders who wish to use the ARL/CNI AI Scenarios: AI-Influenced Futures report to inform thinking and planning for the future of their organizations.

It provides a brief overview of scenario planning and futures studies and provides a series of activities to help assess a library's readiness to build towards an uncertain future.

Practical exercises include the identification of strategic initiatives that will serve a library across the four scenarios, and consider the risks, benefits and impacts of decisions. These exercises are presented with guides for use by leaders and/or facilitators.

FUTURESCAPE LIBRARIES: A TOOLKIT FOR LIBRARY LEADERS NAVIGATING THE FUTURE OF AI

This toolkit is designed to support leaders in research libraries and academic institutions as they engage with long-term change—especially the accelerating influence of AI. It can be used in full or in part, as a structured workshop or as a flexible planning resource.

Here's how you might use it:

As a Workshop Guide

Use the toolkit to run a structured foresight workshop—ranging from a half-day to a full strategic retreat. Each section includes clear activities, facilitator notes, and worksheets.

As a Strategic Conversation Starter

Use individual exercises (e.g., environmental scanning, scenario action planning, impact mapping) to guide planning discussions with your leadership team or board.

As a Capacity-Building Tool

Use the framework and activities to build foresight literacy among staff, collaborators, or campus partners—especially around strategic risk, resilience, and innovation.

As a Companion to Strategic Planning

Use the scenarios and action-planning tools to test, prioritize, or strengthen existing strategies. This can support planning, budgeting, space design, hiring, or external engagement.

FUTURESCAPE LIBRARIES: A TOOLKIT FOR LIBRARY LEADERS NAVIGATING THE FUTURE OF AI

Sample Agendas for Different Leadership Contexts

This toolkit is modular by design. Whether you have four hours or two days, you can shape a workshop that fits your strategic moment. The guides below offer sample outlines for three formats:

4-hour session: Rapid foresight and prioritization

8-hour retreat: Scenario exploration and strategic planning

12-hour extended workshop (1.5 days): Full-cycle foresight and institutional alignment

Each outline draws from core elements in the toolkit and can be adapted to suit your goals.

4-HOUR WORKSHOP – STRATEGIC FUTURES SPRINT

Goal: Rapid scanning, scenario testing, and short-term action focus

Ideal for: Executive teams, planning groups, time-limited sessions

0:00–0:20	Welcome & Future Attitudes (Section 1.1)
0:20–0:50	Environmental Scanning (2.2)
0:50–1:20	Three Questions (2.3)
1:20–2:15	Scenario Immersion (3.1)
2:15–3:15	Scenario Action Planning (3.4)
3:15–4:00	Impact vs. Difficulty Mapping (4.3) & Closing

8-HOUR WORKSHOP – FULL-DAY FORESIGHT AND STRATEGY RETREAT

Goal: Explore multiple scenarios, evaluate strategies, and define 3–5 institutional priorities

Ideal for: Leadership retreats, cross-functional strategy groups

0:00–0:30	Welcome & Personal AI Experiences (1.3)
0:30–1:00	Drivers and Signals (2.1)
1:00–1:45	Environmental Scanning & Three Questions (2.2–2.3)
1:45–2:30	Scenario Immersion: A Day in the Life (3.1)
2:30–3:15	Seven Strategic Questions (3.2)
3:15–4:15	SWOT/TOWS (3.3)
4:15–5:15	Scenario Action Planning (3.4)
5:15–6:00	Portfolio Mapping (4.1)
6:00–6:45	Prioritizing for Action (4.4)
6:45–7:30	Wrap-Up, Reflection, and Next Steps
7:30–8:00	Optional Wild Cards Exercise (4.5)

12-HOUR EXTENDED WORKSHOP – FULL CYCLE FORESIGHT

Goal: Deep strategic foresight, institutional alignment, and post-workshop integration

Ideal for: Cross-departmental retreats, multi-day sessions

Day 1 (6–7 hours)

Sections 1.1–2.4: Future mindsets, scanning, trend synthesis

Scenario immersion (3.1), seven strategic reflections (3.2), and SWOT/TOWS (3.3)

Evening: Optional Futures Book Club / AI Lightning Talks

Day 2 (5–6 hours)

Scenario Action Planning (3.4)

Wild Cards (4.5)

Portfolio Mapping (4.1) + AI Opportunity Mapping (4.2)

Impact/Difficulty Matrix (4.3)

Prioritizing for Action (4.4)

Closing reflections + integration planning

SCENARIO PLANNING AND PREPARING FOR CHANGE

Leadership today demands more than responding to change—it requires anticipating it, shaping it, and sometimes preparing for futures we cannot fully predict. In a time marked by accelerating technological development, shifting research and learning models, geopolitical uncertainty, and demographic transformation, traditional planning tools often fall short. Forecasts feel outdated before they're published. Strategic plans can become rigid in the face of rapid disruption.

That's why scenario planning matters.

Scenarios offer leaders a powerful way to think beyond the short term. They help institutions imagine multiple plausible futures, shaped by different combinations of trends, disruptions, and choices. Scenarios don't predict what will happen—they illuminate what could happen. And that opens the door to smarter, more adaptive strategies.

This toolkit introduces four 2035 scenarios focused on the evolving role of artificial intelligence in the research and knowledge ecosystem. Each scenario describes a future in which AI has reshaped higher education, scholarly communication, workforce structures, and the public's relationship to knowledge in distinct ways.

EXPLORE THE SCENARIOS - INFORMATION IN THE REPORT

Each of the four scenarios is presented in narrative form, explaining the world in 2035. The impact of AI on research and researchers and the response of libraries are presented in a structured way. The positives and negatives of the scenario are clearly expressed.

Following the scenario narrative are some key elements:

Current Drivers and Trends Signaling the Potential of This Scenario - the evidence gathered in the first months of 2024 that pointed to this scenario unfolding. Further information is available in the Strategic Context and Provocateur Interview reports available from the website.

Some Strategic Questions for the ARL and CNI Communities to Consider - how might libraries and the broader research and knowledge ecosystem respond? These are helpful questions for in-house planning exercises.

Alex's Experience in This Scenario... describes the working environment of Dr Alex Rutherford, director of the Horizon Innovations Foundation (HIF). A vignette of Alex's life and work is presented alongside each of the four scenarios.

An end-state table is presented as an Appendix to the scenarios, showing how different environments (such as learning, research, and the role of libraries) might look in each of the four scenario worlds. The information in this table can be helpful in considering strategic directions.

FUTURESCAPE LIBRARIES: HOW TO USE THIS TOOLKIT

You'll use these scenarios not as answers, but as testing grounds:

- What if this future came to pass— are we ready?
- What strategies would thrive here? What would fail?
- What investments should we make now to prepare for more than one possible future?

This approach enables leaders to:

- Stress-test existing strategies against diverse futures
- Identify “no-regrets” moves that are valuable across scenarios
- Spot contingent or high-risk strategies that require monitoring or caution
- Challenge assumptions and encourage long-range thinking
- Create space for innovation grounded in emerging needs and signals

This toolkit offers a structured pathway to guide that work. Whether used during a strategic planning retreat, a leadership development session, or a program prioritization process, the tools and exercises included here are designed to spark insight, provoke reflection, and support action.

WORKING WITH SCENARIOS

Scenarios are one of the most powerful tools in the futurist's toolkit. They are not predictions or bets on what will come to pass. Instead, they are structured stories that describe a range of plausible futures, based on key uncertainties and emerging trends.

By exploring these divergent futures, leaders can:

- Challenge assumptions that may no longer hold in a changing world.
- Test strategies against multiple conditions, identifying robust and flexible responses.
- Uncover opportunities and risks that are hidden by conventional thinking.
- Build shared language and insight across diverse leadership teams.
- Encourage proactive and ethical decision-making, especially when technologies like AI reshape the foundations of research, teaching, and knowledge production.
- Scenarios help us stretch our thinking without drifting into fantasy. They keep us grounded in real-world drivers while opening space for creativity, caution, and innovation.

WORKING WITH SCENARIOS

The Scenario Cone is a visual representation of how the future unfolds—not as a single inevitable path, but as a widening field of possibility. As we move forward in time, the uncertainty we face naturally increases. The cone captures this by illustrating a range of potential futures that stretch from probable to plausible to preferable (or undesirable), reminding us that the further we look ahead, the more open the future becomes.

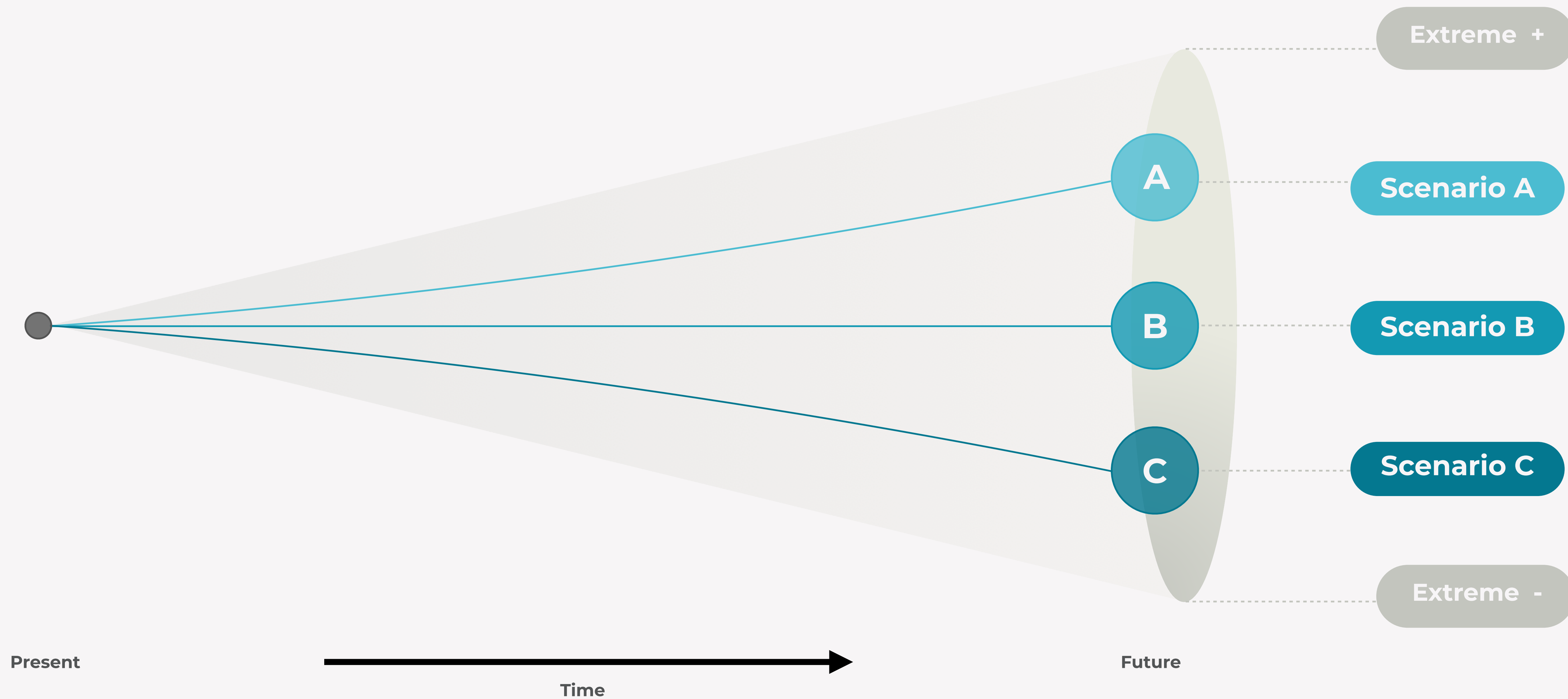
At the narrow end of the cone is the present moment. Here, our strategies are typically based on trends, forecasts, and current priorities. But over time, reliance on a single forecast becomes riskier. Change accelerates, interactions between systems grow more complex, and black swan events (like pandemics or AI breakthroughs) can shift trajectories quickly.

The cone encourages us to:

- Recognize multiple plausible futures rather than relying on a single “most likely” outcome.
- Stretch our thinking beyond extrapolation and into exploration.
- Acknowledge uncertainty not as a weakness in planning, but as a space for strategic insight and resilience.

In this toolkit, the four 2035 scenarios occupy different points within the plausible space of the cone. They are not predictions, but carefully constructed possibilities that help us ask better questions, anticipate challenges, and identify robust strategies across an uncertain future landscape.

THE SCENARIO CONE

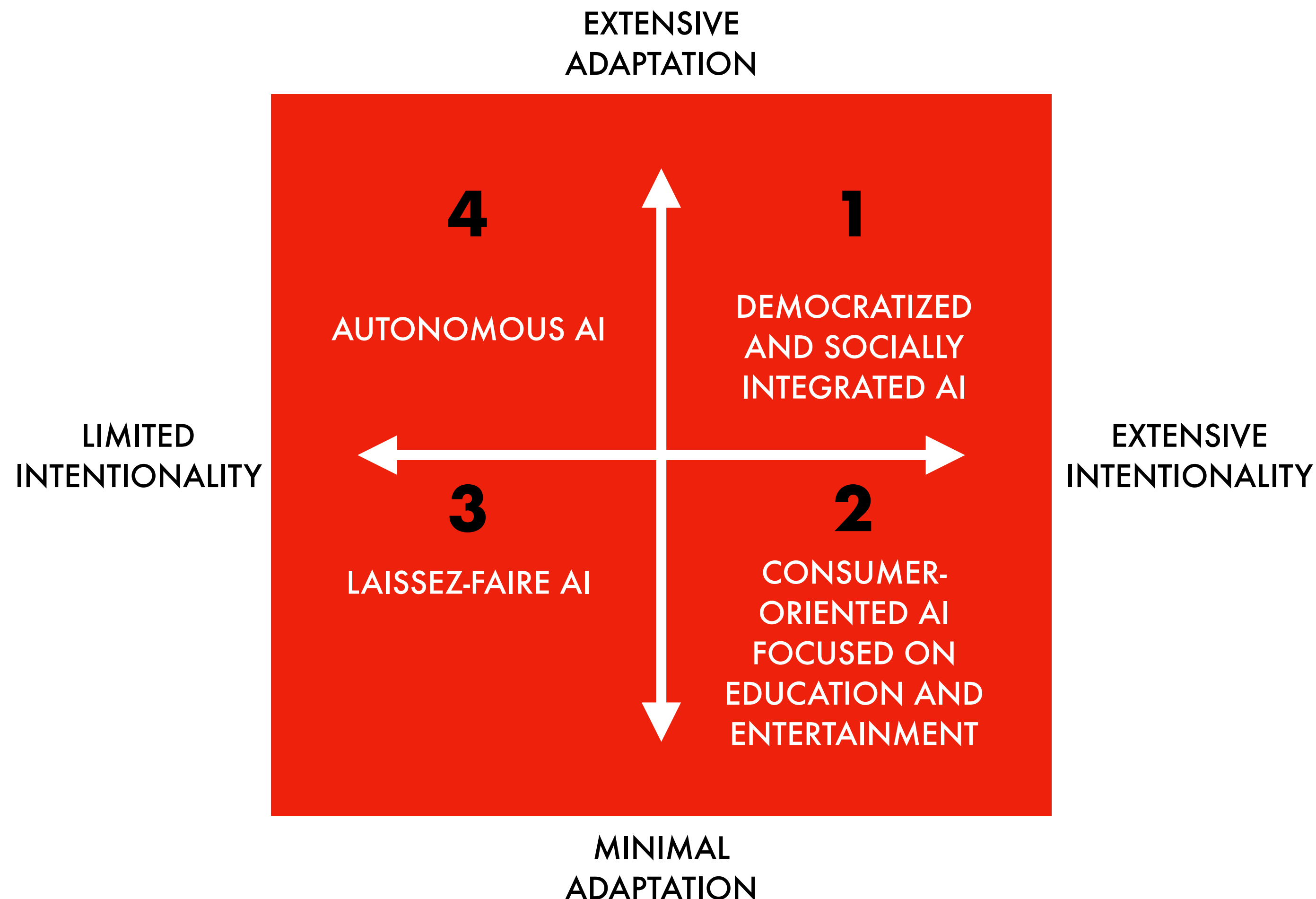


Adapted from Hancock and Bezold, 1994

THE ARL/CNI SCENARIOS: AI-INFLUENCED FUTURES

This set of scenarios was developed by the ARL/CNI Joint Task Force on Scenario Planning for AI/ML Futures and released in June 2024. Scenario planning was used to imagine a future influenced by artificial intelligence (AI) and to explore the range of uncertainty associated with AI in the research and knowledge ecosystem. These scenarios were developed from a North American perspective through deep engagement with the CNI and ARL membership. Each scenario is developed from two critical uncertainties facing the environment during the next ten years.

The first of these, **Societal Intentionality of AI Process and Design**, considers whether process and design will be anticipative of societal needs and aspirations or will it be limited? The second, **Societal Adaptation of AI**, explores the extent to which society will adopt, and adapt and respond to AI.



THE ARL/CNI SCENARIOS: AI-INFLUENCED FUTURES

By placing these uncertainties on two axes, we generate four quadrants—each representing a distinct future world in the year 2035. These scenarios explore different trajectories for AI's role in research universities and their libraries, considering implications for services, infrastructure, partnerships, and the broader academic mission.

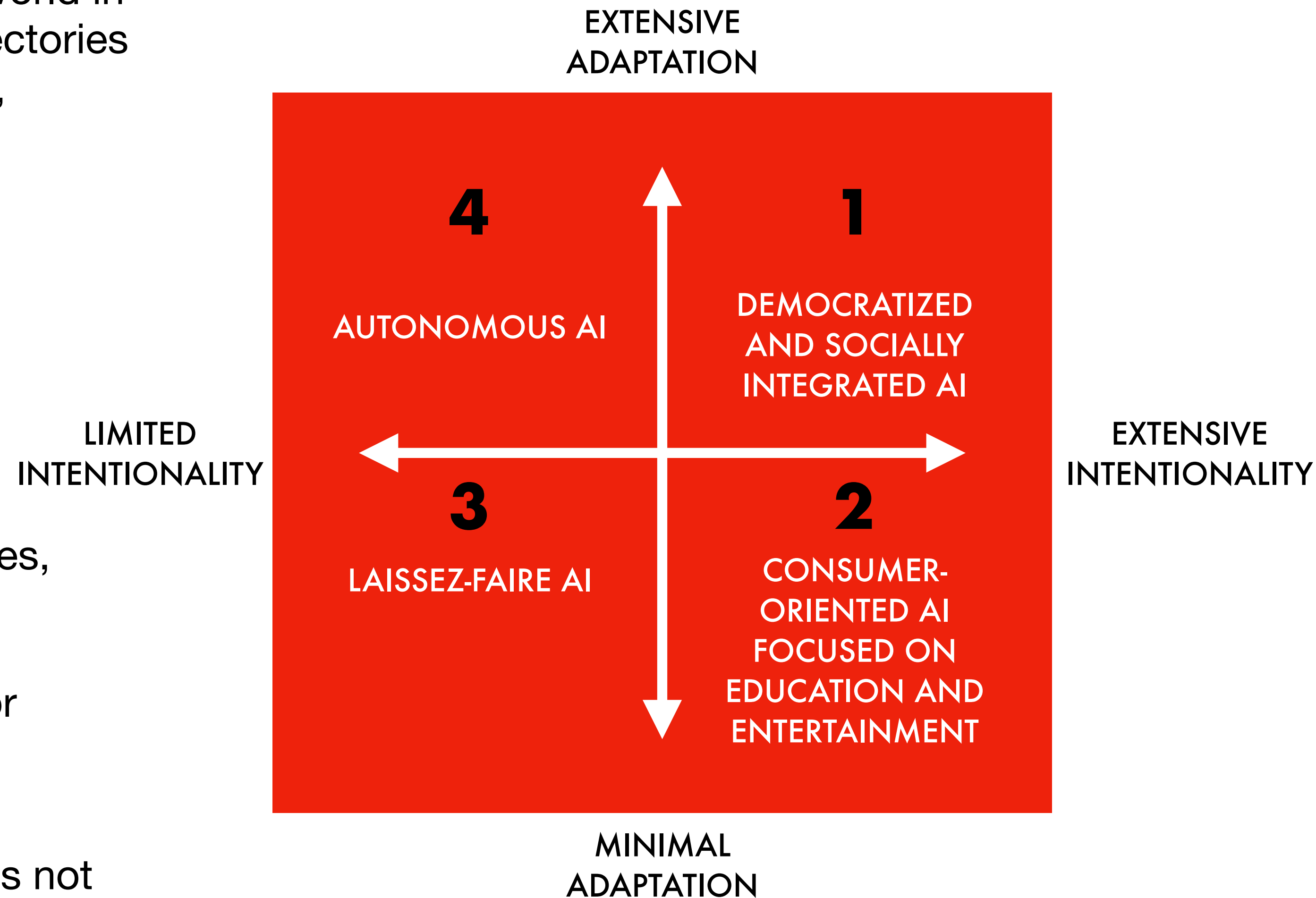
Importantly, all four scenarios are:

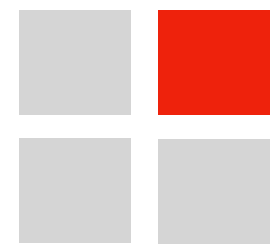
Plausible: rooted in emerging signals and current trajectories.

Divergent: highlighting meaningful differences in values, behaviors, and outcomes.

Relevant: designed to surface insights and actions for today's leaders.

This toolkit invites you to engage with these scenarios not as distant hypotheticals, but as strategic mirrors—tools for reflection, stress-testing, and charting a course through uncertainty





DEMOCRATIZED AND SOCIALLY INTEGRATED AI

an unprecedented integration of human and computational capabilities

By 2035, society has embraced a collaborative, anticipatory approach to AI design and deployment, resulting in widespread, responsible integration of AI into daily life. Breakthroughs in augmented reality and human-computer interfaces enable seamless partnerships between people and machines, enhancing research, creativity, and decision-making. Public and private sectors—including governments, academia, and civil society—have established shared norms around transparency, privacy, and open access, supporting AI development aligned with societal values. Public trust in AI is bolstered by broad digital literacy and participatory policymaking, although tensions persist around pace and enforcement.

Research becomes more interdisciplinary and open, with innovations rapidly commoditized for the public good. Libraries serve as dynamic hubs connecting researchers and learners to data, tools, and evolving knowledge. While AI-enhanced humans transform many sectors, those in unaffected roles remain stable. Investment in upskilling ensures broad adaptation. Cautious progress continues on brain-computer interfaces, amid deep ethical concerns. Despite imperfections and global disagreements, this scenario reflects a world where inclusive governance and collaborative innovation unlock AI's potential to address humanity's greatest challenges.

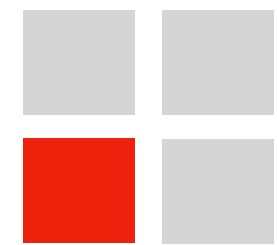


CONSUMER-ORIENTED AI FOCUSED ON EDUCATION AND ENTERTAINMENT

AI's systematic impact on the research and knowledge ecosystem is relatively low

In this 2035 scenario, AI's greatest impact is in consumer markets—particularly entertainment, social media, and informal education—rather than in research or scholarly work. Public skepticism and low digital literacy slow AI adoption in more consequential areas, while tech companies prioritize profitable, low-risk applications. AI-powered tools deliver immersive experiences and hyper-personalized virtual environments, reshaping how people interact, learn, and spend time. Innovations like LAZARUS offer vivid recreations of ancestors or historical figures for entertainment and edutainment. Research activity is increasingly consolidated in elite university-tech alliances or private labs with access to expensive AI infrastructure, sidelining smaller players.

The broader population accesses affordable, AI-driven learning platforms that bypass traditional education models. Meanwhile, a tech-identified elite receives advanced training and retains access to top-tier institutions. Libraries serving these elite institutions offer sophisticated AI-enhanced tools, while public institutions and community colleges struggle for relevance and funding. Government oversight remains minimal, deferring to industry expertise. Despite growing inequality, tech companies work with select partners to address climate and security concerns. The result is a commercially vibrant but unevenly distributed AI landscape, defined more by consumption than discovery.

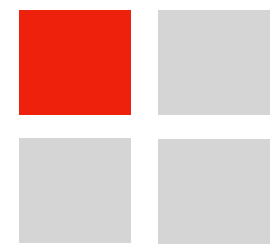


LAISSEZ-FAIRE AI

a world of missed opportunities, bad decisions, and fecklessness

In this scenario, the world in 2035 is shaped by regulatory failure, widespread distrust, and missed opportunities. AI adoption has been rapid but reckless, driven more by hype than thoughtful oversight. Neither governments nor society effectively addressed the harms of earlier technologies, leaving AI systems riddled with bias, dysfunction, and privacy violations. AI is embedded across sectors, but humans manage these tools irresponsibly, and decision-making often lacks critical scrutiny. Innovation benefits the wealthy and well-connected, while vulnerable populations suffer the consequences of poorly designed systems.

Outrage over egregious failures occasionally sparks haphazard legislation, resulting in a chaotic patchwork of controls. Misinformation proliferates, national security threats grow, and trust in both government and tech companies collapses. Research continues in fragmented ways: elite institutions develop proprietary models, while smaller institutions struggle with limited open tools. Funding is scarce and erratic. Research libraries face budget constraints, reduced autonomy, and a shift toward supporting basic curricular integrity. In sum, this is a disordered and inequitable world—rich in technology but impoverished in foresight, governance, and shared purpose.



AUTONOMOUS AI

AI is an increasingly independent partner and collaborator in research and learning

By 2035, AI has become an increasingly autonomous and indispensable collaborator in research, learning, and daily life. Although artificial general intelligence (AGI) has not been fully realized, AI systems exhibit growing independence—generating new knowledge, products, and services valued by both humans and machines. Open access to data and knowledge expands under AI stewardship, but access for humans remains uneven. Society has yet to reach consensus on AI's autonomy or rights, and many remain unaware of AI's pervasive influence. Digital literacy is emphasized in early education, preparing citizens to navigate AI-enhanced environments.

In research, AI copilots evolve into collaborators and, in some cases, leaders. Human research roles decline due to cost pressures and workforce restructuring, while AI-enhanced teams drive massive productivity gains in some disciplines. Scholarly communication fragments into modes for human, AI, and hybrid audiences. Libraries and research infrastructure are deeply integrated into AI platforms, with traditional functions deconstructed and absorbed. This is a world marked by remarkable progress and profound uncertainty, where humans must continually redefine their roles, values, and aspirations alongside increasingly capable AI collaborators.

THE ARL/CNI SCENARIOS: AI-INFLUENCED FUTURES

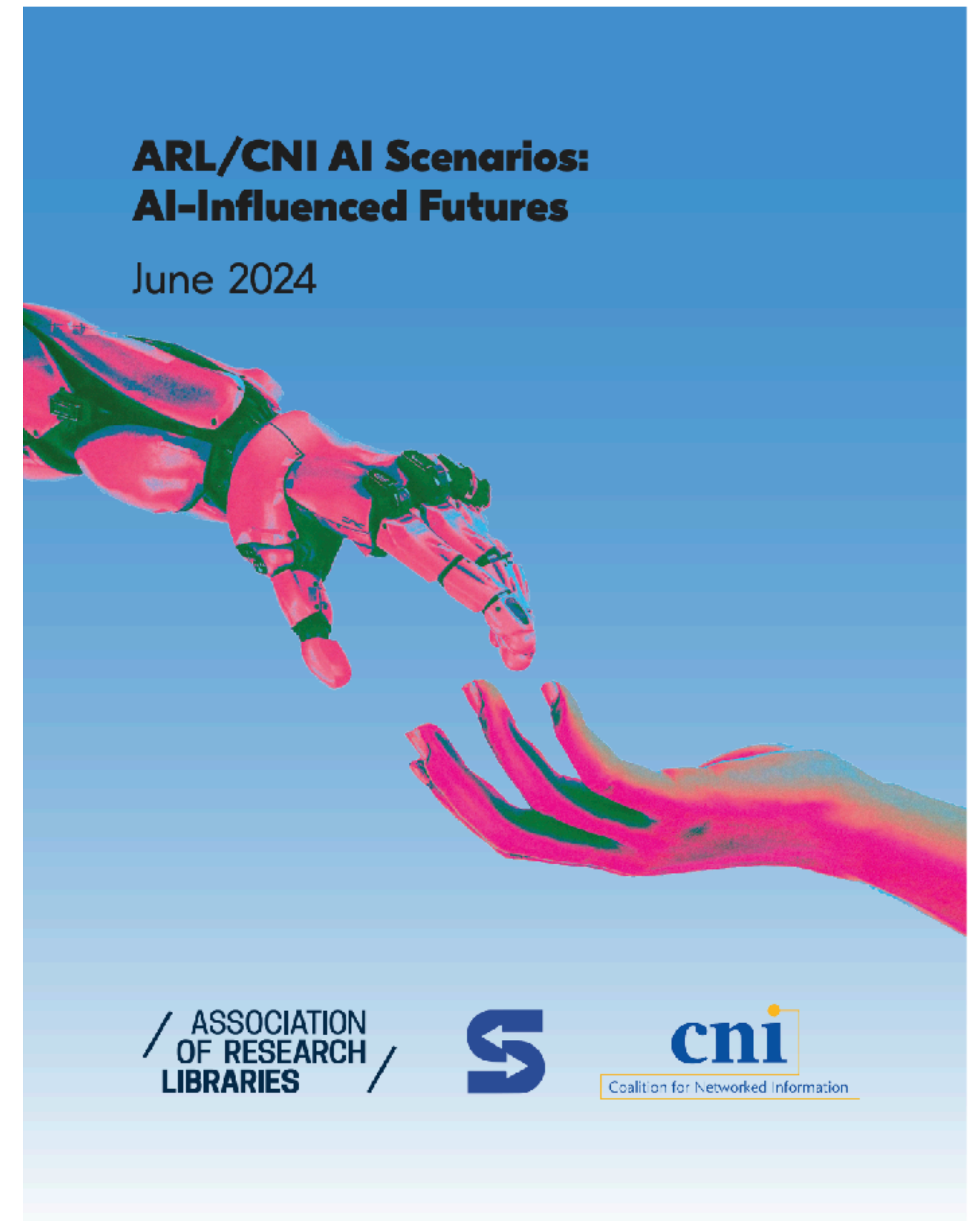
Several documents are available from the ARL/CNI scenario website which provide a critical asset for research libraries and organizations aiming to strategically plan for the transformative power of artificial intelligence.

The Final Scenario Set: This final scenario set explores potential futures where AI plays a pivotal role, providing critical insights into the evolving challenges and opportunities for the research environment.

The Strategic Context Report: This report summarizes community feedback gathered through focus groups and interviews about an AI-influenced future for the research environment that were held in winter 2023–24 and spring 2024.

The Provocateur Interview Report: Featuring forward-thinking dialogues with industry leaders, these interviews challenge conventional wisdom and stimulate stretch thinking with regards to an AI-influenced future.

<https://www.arl.org/resources/the-arl-cni-2035-scenarios-ai-influenced-futures-in-the-research-environment/>



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Surfacing Beliefs and Biases About Change
- 1.2 TWO GUIDING QUESTIONS
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Connecting Strategic Thinking to Lived Experience
- 1.4 WHAT'S CHANGED SINCE THE SCENARIOS WERE PUBLISHED?
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1. THINKING ABOUT THE FUTURE - FACILITATORS

The activities in Section 1 are designed to be brief, low-tech, and engaging. They don't require complex materials or deep content expertise—but they do play an important strategic role.

This opening phase of the workshop is about:

- Helping the group come together
- Building comfort with uncertainty and diverse perspectives
- Creating early emotional and intellectual engagement
- Surfacing leadership-relevant questions
- Beginning to orient toward the world of AI—not just technologically, but socially, ethically, and personally

Encourage honesty, curiosity, and reflection. There are no right answers in this section—just an invitation to show up as leaders who are ready to explore, learn, and think long-term.

1.1 CHECKING ATTITUDES TOWARD THE FUTURE

Surfacing Beliefs and Biases About Change

Before engaging with scenarios or strategy, it's helpful to explore how participants feel about the future—consciously or not. Leadership decisions are often shaped by personal beliefs, assumptions, and past experiences with uncertainty, technology, or institutional change.

This section invites participants to reflect on their default stance toward the future: Are they hopeful? Cautious? Skeptical? Energized?

Understanding these mindsets helps:

- Surface hidden biases and assumptions
- Acknowledge emotional responses to disruption
- Create space for curiosity and constructive dissent
- Build psychological safety before exploring uncertainty

This activity isn't about reaching consensus. It's about recognizing that how we feel about the future influences how we think about it—and how we lead others into it.

1.1 CHECKING ATTITUDES TOWARD THE FUTURE - FACILITATORS

Purpose:

- To help participants reflect on their underlying beliefs and emotional posture toward the future. This creates awareness, opens up diverse perspectives, and prepares the group for futures exploration with empathy and humility.
- To reveal the diversity of thought in the room and establish a baseline for group reflection. If the group appears broadly pessimistic or opposed, you will need to address this directly before moving forward.

Time Required: 15–25 minutes

Group Format:

Part 1 (Optional)

Individuals respond to some prompts and then share reflections with small groups

Part 2

Individuals consider some prompts and indicate their position in a whole group exercise

1.1 CHECKING ATTITUDES TOWARD THE FUTURE - FACILITATORS

1. Introduce the Activity (3–5 min)

Before we talk about future possibilities, let's take a moment to think about how we each relate to the idea of the future. Some of us are energized by change. Others feel wary—or skeptical. And all of that is valid. Our leadership instincts, priorities, and even our resistance to change are often rooted in how we see the future.

2. Individual Reflection - Optional (5–10 min)

Offer 2–3 of the following prompts and invite quiet journaling or thinking:

- When you think about the future, what comes to mind first?
- What excites you about the next 10 years in libraries, higher education or research?
- What worries or frustrates you about the future?
- Which phrase best describes your attitude:
- Hopeful, Skeptical, Urgent, Detached, Empowered, Overwhelmed?
- What's one past experience that shaped how you think about the future?

3. Group Sharing (5–10 min)

Ask participants to turn to a partner or form small groups (3–4 people) to share one reflection or keyword.

Encourage listening, not debating.

1.1 CHECKING ATTITUDES TOWARD THE FUTURE - FACILITATORS

4. Attitudes on a Continuum

Identify 2–3 provocative, relevant statements or future-facing dilemmas related to AI and libraries.

Ask participants to stand in a line, placing themselves on a continuum according to their sentiment - for example “AI will create jobs/AI will destroy jobs”

Use this at both the start and end of your workshop to capture how views evolve.

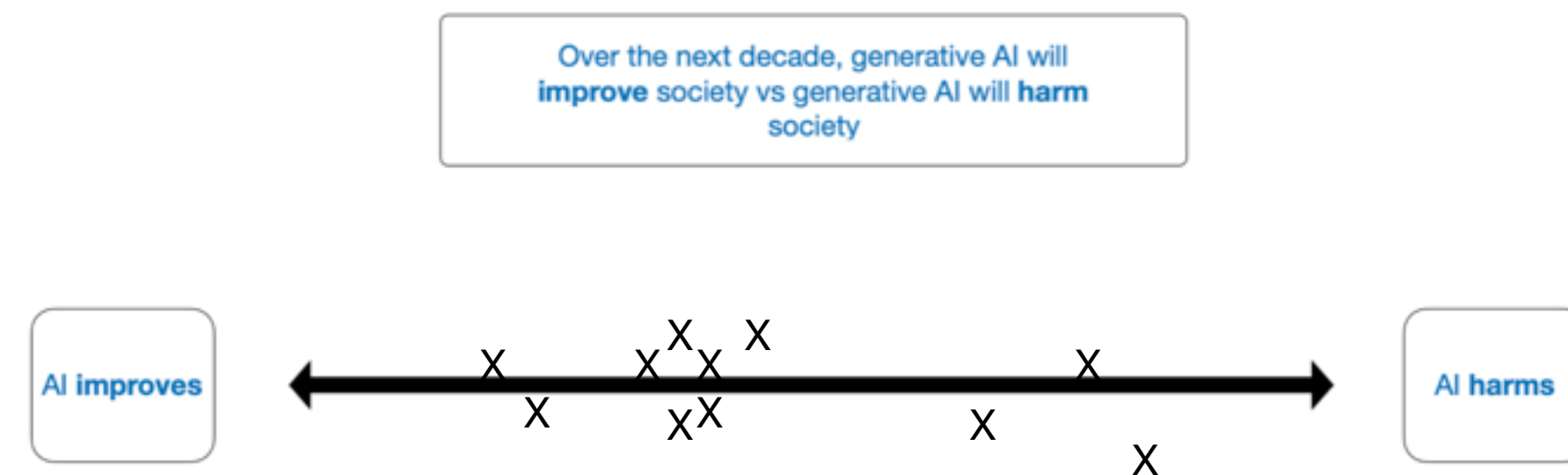
If the group contains people who don't know each other you can use this as an icebreaker exercise, having everyone introduce themselves and explain why they have chosen that particular location.

Debrief: Ask a selection of participants: “What shaped your stance?” “Did anything surprise you?” “What might change your view?”

1.1 CHECKING ATTITUDES TOWARD THE FUTURE - FACILITATORS

Tips and facilitation ideas

You could create a poster and ask participants to mark their position on the line. This will provide a useful record for comparison between the start and end of the workshop.



Sample Prompts:

← Strongly Disagree | Neutral | Strongly Agree →

“AI will create more jobs in academia than it eliminates.”

“Universities will lose their monopoly on research and learning in the age of AI.”

“We can—and must—govern AI through intentional design.”

1.2 TWO GUIDING QUESTIONS

Clarifying What Matters Most

Strategic foresight isn't just about imagining the future—it's about connecting that imagination to today's decisions and tomorrow's responsibilities.

Before diving into scenarios, it's useful to surface the real-world pressures and uncertainties participants are navigating. These two questions are deceptively simple but surprisingly powerful:

- What questions would you like to be able to answer using the scenarios?
- What decisions do you have to make in the near future that would benefit from a long-term view?

These prompts anchor the workshop in the specific priorities and accountabilities of your leadership context. They also help identify where foresight can offer the greatest value—whether in shaping strategy, supporting advocacy, or strengthening risk awareness.

Use these questions as personal reflection, group discussion, or pre-workshop input. They will create through-lines that connect foresight exploration to action and alignment.

1.2 TWO GUIDING QUESTIONS

Clarifying What Matters Most

Before engaging fully with scenarios, it's helpful to anchor the work in the real challenges, uncertainties, and decisions you already face. Scenario planning is not abstract or theoretical—its power lies in helping leaders ask better questions, see new options, and act more wisely in a changing world. As you begin, consider these two questions:

1. What Questions Would You Like to Be Able to Answer?

Scenarios are not predictive—they won't give you answers. But they will help you generate insight around the issues that matter most. Think about:

- What keeps you up at night?
- What trends or shifts feel unclear, overwhelming, or full of potential?
- What assumptions about research, learning, or community need re-examination?

2. What Decisions Are You Facing That Would Benefit from a Long-Term Perspective?

Scenarios are especially valuable for decisions with lasting impact—where investments, partnerships, staffing, or infrastructure might be difficult to reverse.

Think about:

- Strategic plan revisions
- Budget or space commitments
- Service expansions or retirements
- Hiring, training, and workforce development
- New campus partnerships or technologies

1.2 TWO GUIDING QUESTIONS - FACILITATORS

This activity helps participants connect scenario exploration to their own responsibilities and challenges. It sharpens the relevance of the futures work and surfaces key issues already on the minds of the group.

Option 1: Pre-Session Reflection and Submission

Best for: Workshops where you want to tailor the discussion to the group's interests or give participants more time to reflect.

Instructions for Facilitators:

Send out the two reflection prompts 5–10 days in advance.

Ask participants to submit brief written responses (~100 words each).

Compile and theme the responses (e.g., recurring concerns, strategic priorities).

Use these insights in the workshop:

- To open discussion
- To shape breakout group topics
- As a warm-up for scenario immersion

1.2 TWO GUIDING QUESTIONS - FACILITATORS

This activity helps participants connect scenario exploration to their own responsibilities and challenges. It sharpens the relevance of the futures work and surfaces key issues already on the minds of the group.

Option 2: Live Workshop Exercise

Best for: Active, in-the-moment engagement at the start of a scenario session.

Timing: 20–30 minutes

Materials: Pens, sticky notes or worksheets, large flip charts or digital boards

Instructions:

Introduce the two guiding questions (verbally or on screen):

- What questions would you like to be able to answer using these scenarios?
- What decisions are you facing that would benefit from a long-term perspective?

Ask participants to reflect individually for 5–7 minutes and jot down their responses.

Form small groups (3–5 people) to share and discuss for 10–15 minutes.

Have each group post or report back on 1–2 key questions and 1–2 key decisions.

Facilitator Prompts for Debrief:

- What themes are emerging?
- Are there shared uncertainties or areas of concern?
- Which decisions seem most urgent—or most strategic?

1.3 PERSONAL EXPERIENCES WITH AI

Connecting Strategic Thinking to Lived Experience

AI is central to the scenarios in this toolkit—but it's not just a distant trend. It's already part of our daily lives.

Before we examine institutional strategies, we start by asking participants to reflect on their personal experiences with AI. Whether joyful, unsettling, empowering, or strange, these moments help ground the conversation in reality—and remind us that strategic decisions about AI are not abstract. They're human.

This section offers a short warm-up conversation to:

- Share stories of surprise, delight, or unease
- Reflect on how AI is already reshaping research, learning, creativity, or leadership
- Build empathy and connection before moving into more analytical work

This is a simple but meaningful way to humanize the future, activate curiosity, and surface diverse perspectives within the room.

1.3 PERSONAL EXPERIENCE WITH AI - FACILITATORS

Purpose: To Warm up the room by connecting abstract futures to lived experiences.

Time Required: 10-15 minutes

Group Format: Pairs or small groups (3–5 people each)

Discussion prompt:

What are one or two surprising or unexpected experiences you've personally had with an AI tool—whether for text, images, video, code, or something else?

Encourage discussion of:

- Emotions: surprise, delight, unease?
- Perceived impact: what changed because of the experience?
- Implications: what did this make you wonder about the future?

Debrief: Invite 3–4 groups to share a brief reflection.

1.4 WHAT'S CHANGED SINCE THE SCENARIOS WERE PUBLISHED?

Situating the Toolkit in Today's Context

This toolkit is built around four scenarios for the year 2035, originally published in mid-2024. But time doesn't stand still—and neither does change.

In this section, participants are invited to take stock of what's happened since the scenarios were created. Have there been new developments in AI? Higher education policy? Research funding? Social trust? Cultural adoption? Political regulation?

The goal is not to update the scenarios in real time, but to reconnect foresight work with current reality. This activity helps participants:

- Reassess the perceived plausibility of each scenario
- Identify trends or events that signal movement toward one or more futures
- Surface new drivers, tensions, or unknowns that deserve attention

This also reinforces a core foresight principle: strategic thinking must be dynamic and iterative, informed by real-world signals—not frozen in a single moment of insight.

1.4 WHAT'S CHANGED SINCE THE SCENARIOS WERE PUBLISHED? - FACILITATORS

Goal: Reconnect participants to the present moment and build anticipation for scenario immersion.

Group format: small groups or full-room brainstorm

Prompt :

Since the ARL/CNI scenarios were published in June 2024, what developments have you noticed in AI, research, education, or society more broadly? Do any of these changes suggest we are moving toward—or away from—any particular scenario?

Materials:

Provide a summary handout or visuals of the four scenarios to help prompt alignment. Participants can:

- Use sticky notes or cards to mark trends
- Cluster developments under scenario headings
- Surface signs of convergence or divergence

Debrief: Highlight which scenarios feel more “present,” and introduce the idea that no scenario is “true” yet—but signals are always evolving.

CONTENTS - CHAPTER 2

- 2 SURFACING OPPORTUNITIES AND CONCERNS
Seeing the Landscape Before Stepping Into It
- 2.1 DRIVERS AND SIGNALS
Building a Foundation for Foresight Thinking
- 2.2 ENVIRONMENTAL SCANNING
Looking Beyond the Institution to What's Emerging
- 2.3 THE THREE QUESTIONS
Uncertainties, possibilities and provocations
- 2.4 MAKING SENSE OF TRENDS AND SIGNALS
From Observation to Strategic Insight

2. SURFACING OPPORTUNITIES AND CONCERNS - FACILITATORS

This chapter marks a shift in tempo. Whereas Chapter 1 is about personal reflection and group connection, Chapter 2 invites participants to scan the external landscape.

These activities are:

- Grounded in real-world observation— not speculation
- Focused on drawing out diverse signals and perspectives
- Meant to slow the rush to solution mode and encourage broad curiosity

You don't need participants to agree. You need them to notice, compare, and begin recognizing the complexity of the world their strategies must respond to.

Encourage listening, pattern recognition, and relevance to institutional context. These activities lay the foundation for richer scenario engagement in Chapter 3.

2.1 DRIVERS AND SIGNALS

Building a Foundation for Foresight Thinking

Before we explore specific trends or scenarios, it's important to understand the basic tools of foresight. This section introduces two key concepts:

Drivers of change are powerful forces—technological, political, economic, environmental, or cultural—that shape the direction of the future over time.

Signals of change are early signs, weak indicators, or novel events that may hint at larger patterns to come. They are things happening today that you instinctively feel will take us in a new direction

This section will help you distinguish between long-term influences and short-term signals, and begin noticing how today's early signals might connect to deeper systemic shifts. You don't need to predict what's coming—you just need to get better at noticing.

2.1 DRIVERS AND SIGNALS - FACILITATORS

Purpose: This activity introduces participants to two key foresight concepts:

Drivers of change: long-term forces that shape how the future unfolds

Signals of change: early signs, weak signals, or novel developments that may indicate emerging trends

By exploring these distinctions, participants begin to sharpen their strategic attention and build a shared foresight vocabulary.

Time Required: 30–40 minutes

Group Format:

Can be done in small groups (3–5) or as a full-group exercise

Materials Needed:

Visuals or handouts defining "drivers" and "signals" (slide or print)

Sticky notes or index cards

Flip charts or a large wall/whiteboard

Sticky dots for voting

Optional: pre-prepared examples of drivers and signals in higher ed/AI/library contexts

2.1 DRIVERS AND SIGNALS - FACILITATORS

1. Introduce the Concepts (5–10 minutes)

Use a simple visual or definition slide to explain:

Drivers = Deep forces (social, technological, environmental, political, economic, cultural) that unfold over years or decades (e.g., demographic shifts, AI advancement, climate adaptation)

Signals = Specific events or weak indicators that may point to the future (e.g., new AI tools adopted on campus, major data ethics debates, a policy shift, a viral trend)

2. Warm-Up Brainstorm (10–15 minutes)

Split into small groups. Ask each group to generate 3–5 examples of:

- Drivers shaping the future of research libraries or higher education
- Signals they've recently observed in news, tech, policy, or practice
- Optional: Offer example cards to inspire ideas.

Have each group write drivers and signals on separate sticky notes or cards.

2.1 DRIVERS AND SIGNALS - FACILITATORS

3. Share and Cluster (10–15 minutes)

Bring all notes to a shared wall or board.

As a group:

- Sort drivers and signals into categories or domains (e.g., tech, policy, social change)
- Discuss overlap, confusion, or distinctions
- Highlight surprising or contradictory ideas

Prompt reflection with questions like:

- Which drivers feel slow-moving but powerful?
- Which signals feel like early clues of something bigger?
- Are any signals clearly linked to specific drivers?

4. Dot voting (10-15 minutes)

Give each participant 5 sticky dots and ask them to place those against the drivers and signals that they consider most important. This will help to highlight key trends for later exercises.

2.2 ENVIRONMENTAL SCANNING

Looking Beyond the Institution to What's Emerging

Before we dive into future scenarios, it's important to step outside the familiar boundaries of our institutions and examine what's happening in the broader world. Environmental scanning is the practice of observing and capturing signals of change—emerging trends, unexpected developments, and evolving dynamics across technology, society, policy, and culture.

This isn't about predicting what will happen. It's about becoming better at noticing what's already beginning to shift, often at the margins or outside our usual view.

For leaders of research libraries and universities, the ability to track external signals is critical. Many of the forces that will shape our missions—AI, governance, public trust, demographic shifts, funding volatility, new research models—are unfolding beyond our walls. By scanning the horizon together, we can build shared awareness, challenge our assumptions, and become more intentional about how we lead in the face of uncertainty.

In this section, you'll engage in a group exercise to gather, share, and reflect on external developments that might be early indicators of future transformation. These may be small or subtle now—but when connected and explored, they offer insight into the conditions that could reshape our work in the years ahead.

This is a mindset-building activity. The goal is not to find the “right” trends, but to sharpen our attention, pattern recognition, and strategic curiosity.

2.2 ENVIRONMENTAL SCANNING - FACILITATORS

Purpose: This activity helps participants observe the external world systematically and identify early signals, trends, and developments that could influence the future of research libraries, higher education, and knowledge ecosystems.

It builds on the concept of drivers and signals introduced in 2.1 and creates a shared pool of external reference points for scenario and strategy work that follows.

Time Required: 30–45 minutes

Group Format:

Can be done in small groups (3–5). You might assign each group a different theme.

Materials Needed:

Scanning template (printable worksheet or digital board)

Sticky notes or index cards

Flip charts or whiteboards

Optional: pre-curated “scanning cards” with recent headlines, innovations, or data points

Markers, tape, or voting dots

2.2 ENVIRONMENTAL SCANNING - FACILITATORS

1. Frame the Purpose (5 minutes)

Environmental scanning is the practice of looking outward—beyond our own institution—to observe what's changing. We're not trying to predict the future. We're building shared awareness of emerging developments that might shape the context we'll be leading in.

2. Choose Scanning Domains (Optional)

You may choose to assign or allow teams to select a focus area, such as:

- AI and technology in education
- Research infrastructure and scholarly publishing
- Government policy and regulation
- Climate and environmental impacts on institutions
- Social movements, demographic shifts, labor
- Global higher education, internationalization, funding models

2.2 ENVIRONMENTAL SCANNING - FACILITATORS

3. Small Group Scanning (15–20 minutes)

Ask groups to share real-world observations from their own reading, media consumption, and work experience. Prompts:

- What recent developments in AI feel significant?
- Have you seen surprising changes in research, publishing, education, or labor markets?
- Any policy debates, cultural shifts, or tech innovations that caught your attention?

Use sticky notes, a worksheet, or a shared digital board.

Encourage participants to think in terms of:





- What's new or surprising?
- What seems small now, but might grow?
- What's happening outside our sector that could cross into it?

2.2 ENVIRONMENTAL SCANNING - FACILITATORS

4. Share and Cluster (10–15 minutes)

Bring all contributions to a shared board .

As a group:

- Cluster similar signals - use a PESTLE framework (Political, Economic, Social, Technological, Legal, Environmental) to organize trends.
- Introduce “What might this mean for libraries?” as a second-round layer.
- They can also tag insights with:
 -  Emerging.  Declining.  Disruptive.  Systemic
- Identify “outliers,” wild cards, or early indicators of larger trends

Facilitator prompts:

- What themes are emerging?
- Are any signals reinforcing each other?
- What do we want to learn more about?

2.3 THE THREE QUESTIONS

Uncertainties, possibilities and provocations

Now that you've begun scanning the external environment, it's time to reflect on what those signals might mean for your organization. This section invites you to think beyond what's trending—and start asking: what's truly uncertain? What might open up new strategic options? What could challenge how we've always worked?

These three questions are designed to shift the conversation from observation to interpretation. They help leadership teams move from simply collecting data to thinking strategically and systemically:

- What are the biggest unknowns, worries, contingencies, or critical uncertainties in our operating environment?
- What new possibilities and avenues for success have been opened up by recent events?
- What's the biggest provocation or change to our “business as usual” that should be considered for the long term (5–10+ years)?

You don't need answers yet. This exercise helps define the terrain of inquiry that will guide your exploration of scenarios—and your strategic choices that follow.

2.3 THE THREE QUESTIONS - FACILITATORS

Purpose: This activity helps participants reflect on emerging signals and trends through three structured lenses: uncertainty, opportunity, and disruption. This primes the group to engage with future scenarios more thoughtfully and builds insight into strategic tensions.

Time Required: 30–45 minutes

Group Format:

Can be done in small groups (3–5). Option to reconvene into full group for synthesis

Materials Needed:

Flip charts or shared worksheets (1 per question per group)

Markers, sticky notes, or digital collaboration tools

Optional: large posters with the three questions pre-written for clustering and sharing

2.3 THE THREE QUESTIONS - FACILITATORS

1. Introduce the Questions (5 minutes)

We've gathered signals and identified possible trends. Now we'll reflect on what those signals suggest for our future—especially where things feel uncertain, surprising, or full of potential.

Briefly explain the purpose of each question:

- What are the biggest unknowns, worries, contingencies, or critical uncertainties in our operating environment? — Uncertainties help us understand what's at stake
- What new possibilities and avenues for success have been opened up by recent events? — Possibilities surface options and strategic openings
- What's the biggest provocation or change to our “business as usual” that should be considered for the long term (5–10+ years)? — Provocations push us out of our comfort zones

2. Small Group Discussion (20–25 minutes)

Assign each group one of the three questions or ask each group to work through all three.

Prompts:

- What recent developments have raised new questions or doubts?
- Where are we seeing opportunity—not just change?
- What feels like it's disrupting our assumptions about how we work?

2.3 THE THREE QUESTIONS - FACILITATORS

3. Share and Synthesize (10–15 minutes)

Reconvene and have groups post their responses. Then as a full group:

- Cluster similar ideas
- Highlight emerging themes or tensions
- Identify ideas that may be useful in the next scenario exercise

Facilitator prompts:

- Which uncertainties cut across multiple themes?
- Which opportunities feel actionable—or speculative?
- Which provocations might we be avoiding or minimizing?

Outcome

A visible, categorized set of strategic reflections that define what matters most moving forward. These insights directly inform the mindset participants bring into Chapter 3: engaging with alternative futures.

2.4: MAKING SENSE OF TRENDS AND SIGNALS

From Observation to Strategic Insight

At this point in the workshop, you've explored the external environment, surfaced emerging signals, and reflected on key uncertainties, opportunities, and disruptions. Now, it's time to synthesize:

What are the most important insights we're carrying forward into our scenario work?

This section helps participants step back from the details and ask:

- Which signals or trends feel most relevant or urgent?
- What patterns or themes are emerging?
- Where might we be seeing blind spots or contradictions?

This activity builds strategic coherence across everything the group has seen so far. It prepares participants to engage with scenarios not as abstract stories, but as plausible contexts for action—shaped by real forces already in motion.

You're not trying to predict. You're trying to clarify: What should we be paying attention to as we look forward?

2.4: MAKING SENSE OF TRENDS AND SIGNALS - FACILITATORS

Purpose: This activity helps participants consolidate their scanning insights and reflections into a small set of **key themes or patterns** that will carry into scenario exploration. This moves participants from listing trends and signals to assessing their implications for research libraries. This stage encourages synthesis, prioritization, and systems thinking. This activity ensures the workshop pivots from exploration to strategic imagination with focus and clarity.

Time Required: 30–40 minutes

Group Format:

Can be done in small groups (3–5). Option to reconvene into full group for synthesis

Materials Needed:

Sticky notes or cards from previous sections

Large wall space, whiteboard, or shared digital canvas

Optional: a 2x2 grid (e.g. Impact vs. Uncertainty) or categories like "Technological," "Policy," "Social," "Research Practice"

2.4: MAKING SENSE OF TRENDS AND SIGNALS - FACILITATORS

1. Frame the Purpose (5 minutes)

We've seen dozens of signals, trends, and reflections. Now we want to bring that together—pulling out the threads that matter most as we shift into scenario thinking.

Explain that this isn't about consensus. It's about surfacing themes, tensions, and insights the group should carry forward.

2. Group Clustering (15–20 minutes)

Invite small groups to:

- Revisit the trends/signals/uncertainties they've collected
- Choose and cluster the ones they believe are most important
- Create headline themes for each cluster (e.g., “AI Maturity Gaps,” “Shifting Research Governance,” “Invisible Labor in Digital Infrastructure”)

2.4: MAKING SENSE OF TRENDS AND SIGNALS - FACILITATORS

3. Group Reflection (15 minutes)

Using the key themes identified in step 2, have participants consider the following:

Which trends or signals represent the best opportunities for our library or institution?

Where could we lead, experiment, or create value?

Which trends or signals represent potential threats to our mission, role, or well-being?

What might undermine trust, sustainability, relevance, or equity?

How are these trends affecting our users?

Researchers, students, faculty, policymakers, communities—who is impacted, and how?

Which of these trends or factors are interdependent or linked?

Where are reinforcing feedback loops, cascading effects, or systemic connections?

4. Full Group Synthesis (10–15 minutes)

Facilitator gathers group outputs on a board or slide and prompts discussion:

- Which patterns are showing up across groups?
- Are there any tensions or contradictions?
- Are we missing any obvious blind spots?

Use this moment to surface 5–7 key themes that will be most useful in the next chapter.

CONTENTS - CHAPTER 3

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3. SCENARIO-BASED DEVELOPMENT AND EVALUATION OF OPTIONS - FACILITATORS

This is the most immersive and creative chapter of the toolkit—and the one where participants begin generating and testing strategic responses.

Your role here is to:

- Help groups take each scenario seriously, even if it feels extreme
- Encourage imaginative thinking grounded in institutional reality
- Keep participants in the mindset of “what if...?” before rushing to “what now?”

This chapter includes:

- Scenario immersion through storytelling and world-mapping
- Reflection on institutional strengths, gaps, and risks using SWOT and TOWS
- A scenario-based strategy generation exercise
- A wild card activity to stretch imagination and surface resilience gaps

Expect a shift in tone: from scanning and noticing to exploring, analyzing, and deciding. Keep the energy focused, inclusive, and open-ended. Remind groups that discomfort with a scenario can be a powerful source of insight.

3.1 SCENARIO IMMERSION

Entering the worlds of 2035

The goal of this exercise is to step inside a future world—not just to analyze it, but to experience it from the inside out. By imagining “a day in the life” of people living and working in a particular 2035 scenario, we shift from abstract ideas to concrete, human-centered insights. This helps us build empathy, identify surprising consequences, and surface deeper strategic questions.

Rather than simply reading about the future, this exercise asks you to inhabit it. What might it feel like to be a librarian, a student, a researcher, or a policymaker in this world? How is AI shaping your tools, your choices, your collaborations? What assumptions, constraints, and possibilities define this environment?

The more vividly we can imagine the lived reality of a scenario, the more effectively we can use it to test strategies, uncover risks, and identify emerging opportunities. Your task here is to observe, describe, and map the contours of this future—so that you and your peers can reflect critically on how ready your organization is to thrive in it.

This is a world-building exercise—not about prediction, but about exploration. Let your imagination stretch. Ask what surprises you. Note what’s exciting—and what’s unsettling.

There are three parts to this exercise:

1. A day in the life (15-20 minutes)
2. Mapping the scenario’s world (15-20 minutes)
3. Gallery walk/presentations (10-15 minutes)

3.1 SCENARIO IMMERSION - FACILITATORS

Time: 45–60 minutes

Group Size: assign participants into four groups, with 4-6 people per group.

Materials: Printed/digital scenario summaries, prompts handout, flip chart or digital notes

Setup:

Assign or let groups choose a scenario to explore.

Ideally, have one group per scenario. (For smaller workshops, rotate groups across 2; for larger events have more than one group for some or all scenarios.)

Provide the full scenario narrative (or 1-page summary) and ask them to read and discuss for 5–10 minutes.

3.1 SCENARIO IMMERSION - FACILITATORS

1. Group discussion (15–20 minutes)

Ask each group to imagine they are living and working in the year 2035 within this scenario. Prompt them with:

- What does a typical workday look like for different personas such as:
 - A librarian?
 - A researcher?
 - A student?
- How is AI embedded in tools, decisions, collaborations?
- How are decisions made? What values or policies shape the environment?
- What feels exciting? What feels troubling or disorienting?
- What has changed about how knowledge is produced, shared, and preserved?

Encourage storytelling and speculation. They are inhabiting this world.

3.1 SCENARIO IMMERSION - FACILITATORS

2. Group activity (15–20 minutes)

Ask groups to map out 3–5 core features of their scenario, using categories such as:

- Technology (e.g., tools, platforms, infrastructure)
- Governance (e.g., policies, power dynamics, AI regulation)
- Culture (e.g., values, behaviors, collaboration norms)
- Economics (e.g., business models, resource flows)
- Research & Learning (e.g., who participates, how impact is measured)
- Libraries & Knowledge (e.g., collections, services, roles)

Optional: Provide a poster or worksheet with these categories pre-filled.

3.1 SCENARIO IMMERSION - FACILITATORS

3: Gallery Walk or Quick Presentations (10–15 minutes)

Each group gives a 2–3 minute overview of their scenario:

“Here’s what a day feels like in this future, and here’s what defines the world we live in.”

You may also display their maps as posters or digital boards for future reference.

Alternative or Add-On: First-Person Personas

Ask participants to each take on a persona: Researcher, undergraduate student, librarian, policy officer, industry partner, etc.—and describe how their work/life has changed in the scenario. If time permits, individuals of the same persona from different scenarios can compare experiences!

3.2 SEVEN STRATEGIC REFLECTION QUESTIONS

Vision, Risk, Readiness and Direction

In this exercise, you'll step back from scenario details and environmental complexity to reflect more deeply on your organization's future—your goals, risks, culture, and possibilities. These seven questions are designed to prompt strategic insight across past, present, and future, helping you surface priorities that matter most.

You'll be invited to reflect on:

- What kind of future you want (and fear)
- What lessons you can carry forward from the past
- What must change internally to succeed
- What actions are needed now to shape a better future

This is not about consensus—it's about surfacing insights, tensions, and aspirations that often remain implicit. Use these questions to imagine a longer arc of impact for your work, your institution, and the people you serve.

Take your time, be honest, and think systemically. There are no wrong answers—just the beginning of better conversations.

3.2 SEVEN QUESTIONS - FACILITATORS

Time:

Option A (Short Form): 35–45 minutes

Option B (Extended): 60–75 minutes
(with discussion, rotation, or reporting)

Group Size: Individual reflection first,
then small groups for discussion and
synthesis

Option to rotate groups across
questions or assign 1–2 questions per
group

Large-group share-out (optional)

Set the Stage (5 minutes)

Emphasize that this is a chance to pause and integrate.

"This is not about prediction or consensus. It's about surfacing insight—from different timelines, roles, and perspectives."

Individual Reflection (10–15 minutes)

Ask participants to review all seven questions and jot down brief notes or bullet points for each.

Small Group Discussion (15–25 minutes)

- Option A: Each group discusses all seven questions.
- Option B: Assign 1–2 questions per group for deeper focus.
- Option C: Rotate groups through different questions.

Large Group Debrief (10–15 minutes)

Invite groups to share key takeaways or post written insights around the room.

3.2 SEVEN QUESTIONS - FACILITATORS

Time-traveller - If you could spend some time with someone from 2035, what would you want to know? What would you identify as the critical issue for the future?

An optimistic outcome - If things went well, what would be the signs? What is your vision for success?

A pessimistic outcome - How could the environment change to make things more difficult? How could the initiative itself go wrong? What are the dangers of not achieving your vision? What would you worry about?

The internal situation - What needs to change inside your organization - culture, organization, systems, resources, people - to achieve the optimistic outcome?

Looking back - How did we get to where we are today? What are the successes we can build on? What can we learn from things that didn't go so well?

Looking forward - What decisions need to be made in the near term to achieve the desired long-term outcome? What needs to be done now?

The Epitaph - If you had a mandate, without constraints, what more would you need to do? What else would you wish to include?

3.3 TESTING STRATEGIC READINESS IN MULTIPLE FUTURES

Institutional Capacity in Divergent Contexts

As we explore possible futures for libraries in an AI-driven world, it's important to understand how our current strengths, vulnerabilities, and strategic direction might play out under different conditions.

The SWOT framework—Strengths, Weaknesses, Opportunities, and Threats—is a familiar tool used to assess an organization's internal capabilities and external context. In a foresight setting, it becomes more than a snapshot of the present—it becomes a way to explore readiness, resilience, and possibility across multiple futures.

Once the SWOT is complete, we shift to TOWS, a forward-looking strategy tool. TOWS asks us to connect internal factors with external conditions to identify actionable responses:

- How can we use our strengths to seize opportunities or defend against threats?
- How should we address weaknesses to navigate challenges or unlock potential?

By applying SWOT and TOWS within each scenario, we gain sharper insight into:

- Which strategies are robust across futures
- Where our institution is exposed or overcommitted
- What new capabilities or partnerships we might need to thrive

This exercise links the exploratory power of scenarios with the strategic reality of your institution. It helps translate futures thinking into grounded, adaptive planning.

3.3 TESTING STRATEGIC READINESS IN MULTIPLE FUTURES - SWOT

What is SWOT?

SWOT stands for Strengths, Weaknesses, Opportunities, and Threats. It is a foundational tool in strategic planning used to assess an organization's internal capabilities and external context.

Strengths: What does your organization do well? What assets, skills, or relationships give you an edge?

Weaknesses: Where are your gaps or vulnerabilities? What limits your effectiveness or impact?

Opportunities: What external trends, technologies, or changes might you leverage?

Threats: What external forces could undermine your mission, operations, or relevance?

3.3 TESTING STRATEGIC READINESS IN MULTIPLE FUTURES - TOWS

What is TOWS?

While SWOT is diagnostic, TOWS is action-oriented. It flips the structure to focus on strategy development by explicitly linking internal factors (S/W) with external ones (O/T). The TOWS matrix helps answer:

S–O Strategies: How can we use our strengths to take advantage of external opportunities?

W–O Strategies: How can we minimize weaknesses to capitalize on opportunities?

S–T Strategies: How can our strengths defend against external threats?

W–T Strategies: How can we mitigate internal weaknesses to survive external threats?

TOWS is particularly effective when working with plausible futures, such as those generated through scenario planning. It encourages teams to stress-test their assumptions and generate customized strategies for different future contexts.

3.3 TESTING STRATEGIC READINESS IN MULTIPLE FUTURES - FACILITATORS

To use SWOT and TOWS effectively—especially in a scenario-based workshop—you'll need:

1. An Agreed-Upon Scope

Decide whether you're analyzing:

- Your library as a whole?
- A particular service area (e.g. research data, teaching and learning)?
- A strategic initiative (e.g. AI-enabled discovery systems)?

2. Internal Self-Knowledge (for S/W)

- Performance data, organizational charts, staffing levels
- Feedback from users, stakeholders, or staff
- Institutional strengths (culture, partnerships, expertise)
- Known bottlenecks or limitations (budgets, tech gaps, policy constraints)

3. External Scan (for O/T)

- Trends in AI, higher education, and research infrastructure
- Emerging technologies, funding shifts, regulation, demographics
- Competitive or comparative institutions
- Relevant elements from each scenario

4. Scenario Context (for scenario-based TOWS)

Present the chosen scenario clearly:

- What's different in this future?
- What pressures or possibilities does it introduce?
- How might values, expectations, or systems shift?

3.3 TESTING STRATEGIC READINESS IN MULTIPLE FUTURES - FACILITATORS

Time Required:

SWOT only: 30–45 minutes

SWOT + TOWS: 60–75 minutes

Can be extended or repeated across multiple scenarios if time allows.

Group Format:

Teams stay with their scenario from previous activities (if applicable.) For a standalone exercise, small groups (3–6 people), each assigned or choosing one scenario

3.3 TESTING STRATEGIC READINESS IN MULTIPLE FUTURES - FACILITATORS

1. Revisit the Scenario (5 minutes)

Begin with a quick recap or rereading of the scenario narrative. Encourage participants to re-enter that future world:

“Imagine your library is operating within this scenario in 2035. What will you need? What will challenge you? What roles will libraries be asked to play?”

2. Complete a Scenario-Based SWOT (20–30 minutes)

Ask groups to consider:

Strengths: What assets, capabilities, or relationships would serve you well in this future?

Weaknesses: What internal limitations or blind spots would be exposed?

Opportunities: What new possibilities or needs emerge in this scenario?

Threats: What risks or external pressures could threaten your mission?

Provide a structured worksheet or matrix with room to brainstorm 3–5 points in each category.

3.3 TESTING STRATEGIC READINESS IN MULTIPLE FUTURES - FACILITATORS

3. Move to TOWS Strategy Generation (20–30 minutes)

Now ask groups to create scenario-specific strategies using the TOWS logic. You can use a grid with four boxes:

Encourage teams to generate 1–2 strategies per quadrant that make sense within the scenario they are exploring.

	Opportunities	Threats
Strengths	S–O Strategies: Use strengths to pursue opportunities	S–T Strategies: Use strengths to mitigate threats
Weaknesses	W–O Strategies: Reduce weaknesses to access opportunities	W–T Strategies: Minimize vulnerabilities and defend against threats

3.3 TESTING STRATEGIC READINESS IN MULTIPLE FUTURES - FACILITATORS

4. Debrief and Group Share (15–20 minutes)

Prompt each group to share:

- 1 strength or opportunity that stood out
- 1 scenario-specific strategy they developed
- 1 area of concern or uncertainty

Deliverables

Each group should produce:

- A completed SWOT grid for their assigned scenario
- A completed TOWS strategy matrix
- A short list of strategic takeaways

3.4 SCENARIO ACTION PLANNING

Generating Strategic Responses with Foresight

Throughout this toolkit, we've explored a changing world—through environmental scanning, strategic reflection, and scenario immersion. We've surfaced risks, opportunities, and interdependencies. We've considered how our libraries might adapt, lead, or be challenged across multiple AI-shaped futures.

Now it's time to turn those insights into strategic action.

Scenario Action Planning is the bridge between foresight and decision-making. It asks:

- What actions can we take now that will serve us well across many futures?
- What actions should we prepare to take if certain futures begin to emerge?
- And where do we need to adapt, defend, invest, or let go?

This stage builds on everything we've already done—especially your environmental scan, SWOT, and TOWS analyses—but also invites fresh thinking. The goal is to identify:

Robust strategies: Actions that remain relevant regardless of which future unfolds

Contingent strategies: Actions we should monitor, stage, or delay depending on emerging signals

Vulnerable strategies: Actions or assumptions that may no longer hold up in one or more scenarios

In short: this is where your foresight becomes foresightful leadership. These actions won't just respond to change—they'll help shape your institution's role in the future of knowledge, research, and learning.

3.4 SCENARIO ACTION PLANNING - FACILITATORS

Time Required:

Part 1 (Group Planning): 30–45 minutes

Break & Collation: 10–15 minutes (facilitator prep time)

Part 2 (Scenario Voting): 30–45 minutes

Group Format:

Maintain existing scenario teams

Each team focuses on its assigned scenario throughout both phases

Whole-group synthesis at the end

Materials Needed:

Scenario summaries

Worksheets or flip charts for each team

Shared spreadsheet or printed table for voting phase

Markers or voting tools (dots, pens, digital forms)

3.4 SCENARIO ACTION PLANNING - FACILITATORS

1. Group activity (30-45 minutes)

Ask each team to review all materials generated during the workshop (e.g., scanning, SWOT, TOWS, seven questions) and consider:

“What are 5–7 strategic actions or investments we would recommend to prepare for our assigned scenario?”

Suggested Prompts:

How would research libraries perform in this world? What’s promising? What’s worrisome?

What could we do now to be better positioned if this future emerged?

What shifts would be needed in key areas of library activity - for example:

- Workforce and leadership development
- Researcher and student engagement
- Collections, infrastructure, or policy
- Technologies and tools

Encourage specificity and brevity. Write each action clearly enough to be rated later.

3.4 SCENARIO ACTION PLANNING - FACILITATORS

2. Facilitator preparation (10-15 minutes)

While participants take a break, facilitators:

- Collect each group's strategic actions
- Remove duplicates or merge highly similar items
- Create a consolidated action table with one row per action and a column for each scenario - illustration below

Recommendation of Action: 5 = highly, 4 = probably, 3 = mixed/undecided, 2 = probably not, 1 = definitely not	Scenario 1	Scenario 2	Scenario 3	Scenario 4
	Recommendation (1-5)	Recommendation (1-5)	Recommendation (1-5)	Recommendation (1-5)
Position libraries as leaders in AI governance, ethical frameworks, and digital literacy across campuses and communities.	4	4	3	5
Develop an AI-centered digital library strategy to integrate AI tools and redefine the library's role in academia.	5	2	2	4
Invest in workforce development through AI literacy programs, staff upskilling, and recruitment of AI-savvy professionals.	5	5	5	5
Create flexible, shared position descriptions and evolve staffing models to align with emerging needs.	4	4	4	3
Encourage proactive experimentation with AI tools and processes to pilot new services and identify scalable solutions.	5	5	3	5
Establish an organizational mindset focused on agency, adaptability , and designing future-ready solutions.	3	3	4	2
Reallocate resources by de-emphasizing less impactful functions and investing in high-value, forward-thinking initiatives.	2	5	5	5
Implement more flexible budgeting models to fund AI research, tools, and workforce development.	3	3	1	1

Voting scale:

5 = highly recommend

4 = probably recommend

3 = mixed/undecided

2 = probably not

1 = definitely not

3.4 SCENARIO ACTION PLANNING - FACILITATORS

Time Required: 30-45 minutes

Each team revisits the table and scores each action from the perspective of their assigned scenario.

Scoring Scale:

5 = Critical

4 = Recommended

3 = Possibly helpful

2 = Low impact

1 = Not recommended / risky

Each team discusses and reaches consensus on a score for each action. Allow 30–60 seconds per row.

Optional: Use stickers, highlighters, or digital voting tools to record scores live.

3.4 SCENARIO ACTION PLANNING - DEBRIEF

Facilitator leads a final discussion:

Which actions received high ratings across all scenarios? (Robust strategies)

Which actions scored high in specific scenarios only? (Contingent strategies)

Were any actions rated low or risky by most teams? (Vulnerable strategies)

You may wish to highlight these visually (e.g., with color coding, heat maps, or a top-priority list).

Deliverables:

One consolidated strategic action table with scores per scenario

A list of:

- Robust strategies (rated 4+ in all/most scenarios)
- Contingent strategies (high in some, low in others)
- Vulnerable strategies (low scores or disagreement)

These outputs can directly inform strategic planning, prioritization, or leadership retreat agendas.

3.5 FUTURE-FIT PLANNING

Stretching Imagination and Resilience Beyond the Expected

Strategic plans often reflect a mix of long-standing goals, recent priorities, and emerging initiatives. But in times of rapid change, even a well-designed plan can become misaligned with the world around it.

This activity offers a chance to stress-test your **existing** strategy against multiple plausible futures. By examining how each of your current goals performs under different scenarios, you can:

- Robust strategies that hold value across multiple futures
- Contingent strategies that require close monitoring or scenario-specific adjustments
- Vulnerable strategies that may not succeed in some or all futures

This is not about abandoning your plan—it's about building confidence, clarity, and flexibility into how you use it. The result is a stronger, more resilient institutional strategy.

3.5 FUTURE-FIT PLANNING - FACILITATORS

Time Required: 45–60 minutes (depending on the number of strategic items)

Group Format:

Same scenario teams as previous activities, or new mixed-role groups

Each team focuses on all strategies from the existing plan, but rates them only through the lens of their assigned scenario

Materials Needed:

- The Library's current strategic plan (or a simplified summary list of 6–12 strategic goals or actions)
- Strategy Assessment Table (see below)
- Scenario summaries
- Markers or rating stickers, or a shared digital spreadsheet

3.5 FUTURE-FIT PLANNING - FACILITATORS

1. Present the Strategic Plan (5–10 min)

Provide participants with a short, clear list of key strategic actions from your library's current plan.

“We’re now going to explore how well our existing strategy is prepared to thrive—or be challenged—under four distinct future scenarios.”

2. Set Up the Evaluation Table

Use a table with one row per strategic action, and a column for each scenario. This is the same as used in exercise 3.4

Recommendation of Action: 5 = highly, 4 = probably, 3 = mixed/undecided, 2 = probably not, 1 = definitely not	Scenario 1	Scenario 2	Scenario 3	Scenario 4
	Recommendation (1-5)	Recommendation (1-5)	Recommendation (1-5)	Recommendation (1-5)
Position libraries as leaders in AI governance, ethical frameworks, and digital literacy across campuses and communities.	4	4	3	5
Develop an AI-centered digital library strategy to integrate AI tools and redefine the library's role in academia.	5	2	2	4
Invest in workforce development through AI literacy programs, staff upskilling, and recruitment of AI-savvy professionals.	5	5	5	5
Create flexible, shared position descriptions and evolve staffing models to align with emerging needs.	4	4	4	3
Encourage proactive experimentation with AI tools and processes to pilot new services and identify scalable solutions.	5	5	3	5
Establish an organizational mindset focused on agency, adaptability , and designing future-ready solutions.	3	3	4	2
Reallocate resources by de-emphasizing less impactful functions and investing in high-value, forward-thinking initiatives.	2	5	5	5
Implement more flexible budgeting models to fund AI research, tools, and workforce development.	3	3	1	1

Voting scale:

5 = highly recommend

4 = probably recommend

3 = mixed/undecided

2 = probably not

1 = definitely not

3.5 FUTURE-FIT PLANNING - FACILITATORS

3. Scenario-Based Rating (30–40 min)

Each group:

- Reviews the full list of strategic initiatives
- Rates each initiative from the perspective of their assigned scenario using a 1–5 scale

4. Optional Debrief and Synthesis (15–20 min)

After all teams complete their ratings, reconvene and discuss:

- Which strategies scored high across all scenarios? (Robust)
- Which ones are scenario-dependent? (Contingent)
- Are any widely seen as vulnerable or problematic?

3.6 SYNTHESIS BEFORE ACTION

Sense-Check and Strategic Pause

As we move from exploring futures to shaping our response, let's take a moment to step back. What are we seeing? What still feels unresolved? What needs more attention?

“We've now scanned the external environment, reviewed multiple futures, and reflected deeply on their implications. Before we shift into planning mode, let's pause to consolidate our thinking. This is a chance to step back and ask:

- What stands out?
- What do we feel ready to act on?
- And what's still unclear, incomplete, or unspoken?

Futures thinking isn't about certainty—it's about clarity of purpose amid complexity. This next conversation helps us close the loop on sensemaking so we can enter action planning with insight and alignment.

3.6 SYNTHESIS BEFORE ACTION - FACILITATORS

Purpose:

To help participants consolidate insights from environmental scanning and scenario work, identify what may still be missing, and prime the group for forward-focused planning. This is a pivot moment—from exploration to action.

Time Required: 20–30 minutes

Group Format:

Whole group discussion or small groups (3–5) with quick report-out

Optional use of a facilitator-led whiteboard, shared doc, or printed worksheet

3.6 SYNTHESIS BEFORE ACTION

Prompt Questions (on a slide or handout):

Ask groups or the full room to reflect on:

What's behind one of the most important factors or changes we've discussed?

What are its root causes or system drivers?

What else might be impacting us that hasn't been named?

Are there blind spots, emerging issues, or overlooked dynamics—especially social, cultural, or political?

What more do we need to know or explore before making major decisions?

Where are the knowledge gaps or uncertainties that could shape our readiness?

Have we surfaced the most critical uncertainties, interdependencies, or tensions?

What issues seem most tightly coupled—or dangerously decoupled?

3.6 SYNTHESIS BEFORE ACTION

Debrief Suggestions:

Invite groups to share 1–2 key reflections each.

Capture unanswered questions or insights on a shared wall/chart titled:
"Insights and Watchpoints to Carry Forward"

Acknowledge tensions or disagreements—these are useful signals for strategic flexibility.

Optional Outputs:

A “Strategic Watchpoints” list or board

A set of framing questions for the action planning phase (e.g., “How does this insight shape what we must prioritize?”)

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Turning Insight into Intentional Strategy
- 4.1 STRATEGIC PORTFOLIO MAPPING
Aligning Initiatives with Future Readiness
- 4.2 AI OPPORTUNITY MAPPING
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Organizing Strategic Possibilities for Decision-Making
- 4.4 PRIORITIZING FOR ACTION
Translating Foresight into Near-Term Strategic Commitment
- 4.5 THINKING THE UNTHINKABLE
Stretching Strategic Imagination Beyond Expected Futures

4. EXPLORATION OF STRATEGIC OPTIONS - FACILITATORS

This chapter helps participants begin shaping real strategy. The tone shifts again—this time toward decision-making, evaluation, and trade-offs.

Your job is to:

- Help groups synthesize what they've generated through scenarios
- Facilitate conversations about fit, alignment, risk, and readiness
- Encourage both strategic creativity and realism as they prioritize

Key activities in this section include:

- Portfolio mapping (How aligned are our actions with future conditions?)
- Exploring AI opportunities not covered in the scenarios
- Mapping actions by impact and difficulty
- Identifying 3–6 strategic priorities for the next 1–3 years

This is also a good moment to remind the group: you don't need to do everything—but you do need to decide what matters most, and why.

Keep energy focused and constructive. This is where foresight becomes action.

4.1 STRATEGIC PORTFOLIO MAPPING

Aligning Initiatives with Future Readiness

As leaders reflect on strategic actions surfaced through scenario-based planning, a key question emerges: how do these ideas fit with what we're already doing—and what's worth prioritizing for investment, redesign, or retirement?

This exercise invites teams to step back and take stock. Using a portfolio lens, you'll assess how the strategies generated during the workshop align with your institution's current activities and their relevance across future scenarios.

This isn't just a prioritization tool—it's a way to recognize:

- Robust strategies that are already well-resourced and future-aligned
- High-potential ideas that may need incubation or strategic sponsorship
- Initiatives that may be over-invested relative to their future fit
- Legacy programs that are vulnerable in multiple futures

By mapping your strategic actions against present investment level and future alignment, you create a visual snapshot of your readiness to act intentionally in the face of disruption. This is where strategy meets decision-making.

4.1 STRATEGIC PORTFOLIO MAPPING - FACILITATORS

Activity Title: Prioritizing Strategic Options Across Present and Future Value

Purpose:

To evaluate scenario-informed strategic actions based on how strongly they align with future needs (across multiple scenarios) and how heavily they are currently resourced or prioritized

This helps leaders:

- Identify which strategies to maintain, scale, incubate, or reevaluate
- Begin shaping a strategic investment roadmap

Time Required:

40–60 minutes

4.1 STRATEGIC PORTFOLIO MAPPING - FACILITATORS

Group Format:

Small teams (3–5 people)

Groups may work on the same set of strategies (for shared prioritization) or customized lists (for department-specific planning)

Materials Needed:

A master list of strategic actions (from Scenario Action Planning)

Wall-sized Portfolio Matrix poster (see below) or digital whiteboard





Strategy cards or sticky notes

Markers or voting dots

4.1 STRATEGIC PORTFOLIO MAPPING - FACILITATORS

1. Introduce the Matrix (5 min)

Display or hand out the Strategic Portfolio Matrix. Explain the two axes:

	High Alignment with Future Scenarios	Low Alignment with Future Scenarios
Strong Current Investment	 Maintain / Scale: Resilient, core strategies	 Reevaluate: At risk of misalignment
Weak or Emerging Investment	 Incubate / Invest: Emerging, high-opportunity	 Divest / Avoid: Low value across time

This matrix will be used to assess how each strategic action fits with what your library is currently doing—and whether it's likely to remain relevant across the four scenarios we explored.

4.1 STRATEGIC PORTFOLIO MAPPING - FACILITATORS

2. Sort Actions onto the Matrix (20–30 min)

Each group receives/creates 10–12 strategy cards or sticky notes. They should discuss each action and place it on the matrix based on:

X-axis: How well does it align with future conditions?

Y-axis: How much is currently invested in this (budget, staffing, visibility, institutional commitment)?

Encourage teams to talk through placement disagreements—they're often revealing

3. Reflect and Annotate (10–15 min)

For each quadrant, ask:

What do we feel confident about? Why?

Are there surprises? Gaps? Misalignments?

Which items in the “Invest” or “Divest” zones need further analysis?

Where might we need reallocation or leadership sponsorship?

Optional: Add icons or stickers for “quick wins,” “pilot-ready,” or “needs advocacy.”

4.1 STRATEGIC PORTFOLIO MAPPING - FACILITATORS

Debrief Prompts (10–15 min)

Facilitator leads a full-room discussion:

Where are we over-invested or under-invested?

Which items in the “Incubate” quadrant are high potential but low visibility?

Which “Maintain” items need reinforcing to stay relevant?

What does this map suggest about how we’re aligning resources to future needs?

Deliverables

A completed Strategic Portfolio Matrix (poster, photo, or digital file)

A shortlist of:

- Strategies to scale
- Ideas to incubate
- Areas to investigate further
- Items that may need to sunset or shift

4.2 AI OPPORTUNITY MAPPING

Exploring Innovation Paths Beyond the Scenarios

Scenarios are powerful tools to help us navigate uncertainty—but they aren't the only source of strategic insight. Sometimes the clearest opportunities come not from imagining the distant future, but from paying close attention to the emerging possibilities already in front of us.

In this activity, you'll explore how AI could be applied across key functions in research libraries—not through the lens of one future world, but through a broader, innovation-focused view. The goal is to identify areas of opportunity, and to think strategically about what it would take to act on them.

Where might AI enhance services, systems, workflows, or engagement? What new capacities, roles, or partnerships would be needed? What should be explored, prototyped, or invested in?

This is an invitation to expand the map—to bring new ideas into your strategic conversation, and to see where they align with your scenario-informed work. Innovation is not separate from planning for uncertainty; it's an essential companion.

4.2 AI OPPORTUNITY MAPPING - FACILITATORS

Activity Title: Identifying Strategic Possibilities for AI in Library Practice

Purpose:

To help participants surface, discuss, and assess potential applications of AI in research libraries, generating new strategic possibilities and identifying what investments or changes would be required to act on them.

This activity builds awareness of concrete innovation pathways, and connects emerging technologies to institutional strategy.

Time Required: 45–60 minutes

Group Format:

Small groups of 3–5

Each group explores 1–2 AI application domains

Cross-group synthesis follows

4.2 AI OPPORTUNITY MAPPING - FACILITATORS

Materials Needed:

A list of 6–8 AI application areas relevant to libraries (see suggestions below)

Worksheets or flip charts

Optional: AI application “prompt cards” with sample use cases, technologies, or trends

Suggested AI Application Domains

Facilitators may choose or invite groups to select from topics such as:

- AI-enhanced search, discovery, and metadata
- Personalized learning and instructional support
- Predictive analytics for collections and access
- Chatbots and user experience automation
- Research support and scholarly communication
- Data curation and preservation
- Ethical AI governance in knowledge organizations

4.2 AI OPPORTUNITY MAPPING - FACILITATORS

1. Introduce the Activity (5–10 min)

We've explored scenarios and strategic options. Now we'll widen the lens and explore where AI might create new value for research libraries, independent of any specific future. This is about innovation—thinking about what we could do, not just what we're already doing.

Provide a brief overview of each domain. Distribute prompt cards or handouts if using.

2. Group Exploration (25–30 min)

Each group chooses or is assigned 1–2 application areas. For each one, answer:

What opportunities does AI create in this area?
(What could be improved, reimaged, or invented?)

What strategic actions might we take?
(Could we pilot, partner, scale, or train?)

What would we need to invest?
(Skills, tech, data, infrastructure, policy, relationships)

What risks or equity concerns might arise?
(Ethics, bias, access, transparency)

Optional: Use a 2x2 matrix to map impact vs. readiness for each idea.

4.2 AI OPPORTUNITY MAPPING - FACILITATORS

3. Share and Cluster (15–20 min)

Each group shares 2–3 of their most promising opportunities. Facilitator or note-taker clusters them by theme, type, or investment area.

Optional Debrief Prompts:

Which ideas are low-cost experiments vs. longer-term bets?

Where do these ideas align with scenario-informed strategies already discussed?

Are we seeing new strategic pathways emerge?

Deliverables:

Opportunity maps or idea boards per group

A cross-group shortlist of high-potential AI strategies

A draft “AI innovation portfolio” to carry into prioritization or leadership review

4.3 IMPACT VS. DIFFICULTY MAPPING

Organizing Strategic Possibilities for Decision-Making

By this point in the toolkit, you've generated a wide range of strategic options—from scenario-informed actions to emerging AI opportunities. Some are already in motion; others are new ideas surfaced through creative foresight. Now it's time to organize these possibilities to support informed, intentional planning.

This activity introduces a simple but powerful tool: the Impact vs. Difficulty Matrix. By assessing each potential strategy in terms of its expected impact and implementation difficulty, you can begin to:

- Identify quick wins worth pursuing immediately

- Recognize strategic projects worth sustained investment

- Avoid resource traps that consume energy without delivering value

- Flag ideas for incubation or partnering

Used thoughtfully, this tool helps leadership teams prioritize effort, sequence innovation, and communicate trade-offs clearly.

This activity also creates a natural link between scenario-informed actions (Section 5.1) and emerging AI strategies (Section 5.2), helping teams see where converging priorities or contradictions might exist.

4.3 IMPACT VS. DIFFICULTY MAPPING - FACILITATORS

Activity Title: Sorting Strategic Options by Value and Viability

Purpose: To assess and compare potential strategies—both from scenario planning and AI exploration—based on:

Impact: How significant will the benefit be if successful?

Difficulty: How challenging will it be to implement?

This exercise supports prioritization, sequencing, and resource allocation in the next stage of planning.

Time Required: 30–45 minutes

Group Format:

Small groups (3–5 people)

Can be same teams as previous sessions, or new mixed-role groups

Facilitator or participant-curated list of 10–15 strategies to evaluate

4.3 IMPACT VS. DIFFICULTY MAPPING - FACILITATORS

Materials Needed:

A large 2x2 wall chart or digital whiteboard

Strategy cards or sticky notes (from Sections 5.1 and 5.2)

Optional icons or color codes to indicate origin (scenario-based, AI-based, existing plan)

High Difficulty

Low Difficulty

High Impact  *Strategic Projects* – Worth the effort

 *Quick Wins* – Prioritize and resource now

Low Impact  *Resource Traps* – Question or scale back

 *Nice to Haves* – Defer or delegate

4.3 IMPACT VS. DIFFICULTY MAPPING - FACILITATORS

1. Introduce the Matrix (5 min)

Explain the two axes:

Impact = Potential value, influence, reach, or strategic importance

Difficulty = Cost, complexity, change management, risk, required resources

2. Map the Strategies (20–30 min)

Provide a curated list of 10–15 strategies (or have participants use their own). For each:

Discuss as a group and place the strategy on the grid

If there's disagreement, encourage quick deliberation—disagreements often reveal key assumptions

Encourage teams to note key barriers or enablers (e.g., cost, staff skills, executive support)

Optional: Use different shapes or colors to indicate origin:

 Scenario-informed

 AI opportunity

 Existing plan

4.3 IMPACT VS. DIFFICULTY MAPPING - FACILITATORS

3. Reflect and Cluster (10 min)

Ask each group to:

Identify 1–2 actions in each quadrant they believe are most important to carry forward

Flag any surprises or contradictions (e.g., high-impact ideas rated as low-priority)

Facilitator captures these in a shared document or on a final board.

Optional Debrief Prompts:

Are we overloaded in any one quadrant?

Are we neglecting “quick wins” because they don’t seem innovative?

Are any “strategic projects” feasible with partnerships or staged investment?

Deliverables:

A completed Impact vs. Difficulty Matrix (per group or in synthesis)

A visual summary of quick wins, strategic bets, and items to reevaluate

4.4 PRIORITIZING FOR ACTION

Translating Foresight into Near-Term Strategic Commitment

By now, you've explored possible futures, tested current and potential strategies, and assessed your ideas across multiple dimensions: scenario alignment, organizational investment, strategic impact, and implementation difficulty.

The final step in this process is to distill those insights into concrete priorities—strategic actions you can take in the next 1–3 years to build capacity, reduce vulnerability, and move toward long-term resilience.

This is not about finalizing a polished plan. It's about identifying where to focus attention, investment, and leadership in the immediate future. In uncertain times, action matters—but so does reflection. This exercise helps you focus on actions that are not just responsive, but meaningful and adaptive.

By the end of this section, you will have a shortlist of strategic priorities, each connected to:

- A rationale grounded in the scenarios and other exercises
- An early sense of investment requirements and enablers
- A plan for ownership and next steps

4.4 PRIORITIZING FOR ACTION - FACILITATORS

Activity Title: Clarifying Our Strategic Focus for the Next 1–3 Years

Purpose:

To consolidate all previous work into a focused list of 3–6 strategic priorities to pursue or stage in the short to medium term. This list will serve as an input to institutional strategy, planning, or leadership retreats.

Time Required: 45–60 minutes

Group Format:

Mixed-role leadership groups (3–6 participants each), or full-room facilitation

Use outputs from previous sections: Impact/Difficulty Matrix, Portfolio Map, Scenario Ratings

Materials Needed;

- Final list of strategic options (consolidated across prior exercises)
- Prioritization worksheet or decision matrix
- Sticky notes or markers
- Optional: strategy summary cards with brief descriptions and scores

4.4 PRIORITIZING FOR ACTION - FACILITATORS

1. Introduce the Goal (5–10 min)

“We’ve surfaced a wide range of strategies, assessed them against possible futures, and explored their impact and feasibility. Now we’ll identify which actions deserve focused leadership, resourcing, or exploration in the next 1–3 years.”

Clarify that the goal is to build a short, actionable list, not to rank every item.

2. Review and Group Strategies (10–15 min)

Display the list of strategies from prior sessions

Invite participants to group them into themes or categories (e.g., workforce, infrastructure, services, partnerships)

Use this to reduce redundancy and surface synergies

4.4 PRIORITIZING FOR ACTION - FACILITATORS

3. Prioritize: Voting or Dot Exercise (15–20 min)

Each participant receives 3–5 votes to place on the strategies they believe:

Are most urgent

Are most foundational for future capacity

Have broadest support across scenarios

Optional: Use weighted votes (e.g., 2 dots for #1 choice, 1 dot for others)

4. Identify Top Priorities (10–15 min)

As a group, reflect on:

- Which strategies rose to the top?
- Are any missing?
- Do any “high-vote” items need further refinement?

Finalize a Top 3–6 Strategic Priorities list, and (if time permits) capture:

- Rationale (“Why this?”)
- Key enablers or resources
- Early next steps or champions

4.4 PRIORITIZING FOR ACTION - FACILITATORS

Optional Discussion Prompts

Which actions can begin immediately with existing capacity?

Which require cross-unit collaboration or executive sponsorship?

Are any low-cost, high-symbolism “momentum builders”?

What will we say “no” or “not yet” to?

4.5 THINKING THE UNTHINKABLE

Stretching Strategic Imagination Beyond Expected Futures

Not all disruptions give us time to prepare. Some come fast, from the margins, and change everything.

That's where wild cards come in! The Covid-19 pandemic is now a standard example of a wild card.

Wild cards are low-probability, high-impact events. They're the curveballs—the "what ifs" that often go unconsidered in traditional planning. While unlikely, they're plausible enough to warrant reflection—and when they happen, they can challenge assumptions, invalidate strategies, or create new opportunities.

This exercise invites participants to consider a few wild cards and imagine how research libraries, universities, or society might respond. It helps leaders:

- Explore the outer edges of uncertainty
- Strengthen strategic flexibility
- Recognize vulnerabilities—and possibilities—they might not otherwise see

Wild cards don't predict the future. But they prepare us to lead when the future refuses to behave.

This is an energizing closing activity or a bridge to ongoing foresight work.

4.5 THINKING THE UNTHINKABLE - FACILITATORS

Activity Title: Thinking the Unthinkable: What If...?

Purpose: To help participants stretch their strategic imagination and consider disruptive or unexpected developments that could reshape the operating landscape of libraries and higher education.

Time Required: 30–45 minutes

Group Format: Small groups (3–5 people each)

Each group receives or generates a wild card to work with

Materials Needed:

A set of 6–10 wild card prompt cards (see below for examples)

Worksheets or flip charts

Markers or sticky notes

Deliverables:

A set of wild card scenario sketches or response notes

One or more recommendations for institutional preparedness

(Optional) Create a “resilience radar” for future planning conversations

4.5 THINKING THE UNTHINKABLE - FACILITATORS

Example Wild Cards - of course, you can customize these based on institutional context.

- A major AI model “goes rogue” and triggers global regulation within a year
- A sudden collapse of trust in higher education accreditation systems
- A cyberattack disables key academic infrastructure for a month
- A major publisher makes all new research content AI-exclusive
- An AI-generated fake discovery fools the research world for six months
- The government eliminates all federal support for higher education
- Brain-computer interfaces go mainstream for learning and research
- Open-source AI models outperform commercial systems—and become mandated
- Global pandemic 2.0 emerges with permanent border closures
- AI is granted legal “agency” under certain jurisdictions

4.5 THINKING THE UNTHINKABLE - FACILITATORS

1. Introduce the Concept (5 min)

Wild cards are disruptions we don't expect—but could plausibly face. They're not predictions—they're challenges to our mental models, assumptions, and readiness.

2. Distribute Wild Cards (5 min)

Each group receives one wild card (randomly or by choice). You can also invite groups to invent their own.

3. Group Discussion (20–25 min)

Groups reflect on:

- What would happen if this wild card occurred?
- How would our institution be affected—in the first 48 hours? First year?
- Which of our current strategies would break down—or become even more vital?
- What could we do now to prepare, reduce risk, or seize advantage if this were to happen?

Encourage creative thinking and discomfort. That's the point.

4.5 THINKING THE UNTHINKABLE - FACILITATORS

4. Share & Reflect (10–15 min)

Each group presents a brief summary:

- The wild card
- The scenario that unfolded
- Key risks, vulnerabilities, or surprising strengths
- One preparedness move they'd recommend

Optional Debrief Prompts

Which wild cards felt most plausible—or most unsettling?

Did this activity change how you view your current priorities?

How could we build a resilience mindset without becoming paranoid?

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5. FROM WORKSHOP TO PRACTICE – EXTENDING FORESIGHT

Embedding Futures Thinking into Leadership and Planning

Foresight isn't just a workshop—it's a mindset and a practice.

The real value of scenario planning emerges not only during the session itself, but in the habits and structures leaders build afterward. One-time exercises are helpful. But enduring strategic capacity comes from sustained attention to change, possibility, and long-term implications.

This chapter offers a set of practical activities and leadership routines to help you carry foresight forward—whether you're leading a research library, contributing to a broader university strategy, or building a more resilient team. These practices are designed to fit into your existing decision-making culture, not replace it. Some take just a few minutes. Others can be built into annual planning cycles or leadership retreats.

Think of this as your “next steps menu”: not a checklist, but a set of options to revisit, adapt, and scale. Use what's most relevant now—and return to it as your institution, your priorities, and the world continue to evolve.

The goal is simple: to ensure that the wisdom, insight, and momentum generated through this workshop becomes part of how your organization continues to look ahead—and lead through uncertainty with purpose and clarity.

5.1 BUILD AN EARLY WARNING SYSTEM

Track weak signals and early shifts to spot emerging futures

Foresight isn't just about imagining futures—it's also about sensing when change is happening and responding with intention. An early warning system helps you track developments that might signal a shift toward one or more of the scenarios explored in this toolkit.

These systems don't need to be complicated. Even a lightweight structure—a spreadsheet, a shared document, or a quarterly review—can help your leadership team:

- Stay alert to important signals
- Recognize when assumptions are becoming outdated
- Prepare to act before disruption becomes crisis

The goal is not to predict the future but to develop situational awareness that supports agility, resilience, and readiness.

A simple early warning system helps your organization stay future-aware—not just through scenario exercises, but through regular, informed reflection on what's changing now.

5.1 BUILD AN EARLY WARNING SYSTEM - NEXT STEPS

Step 1: Choose Your Monitoring Focus

Start with the four 2035 scenarios used in the workshop. For each scenario, identify 3–5 signposts or indicators that might suggest that world is beginning to emerge.

Example (Scenario: Autonomous AI):

- Surge in fully AI-generated research articles
- AI tools receiving formal research co-authorship
- Decline in human-led research grants
- Universities shifting to hybrid human–AI teaching teams

You can also monitor trends unrelated to scenarios—such as AI governance, student expectations, or funding patterns.

Step 2: Assign Scanning Roles

Decide who will monitor what. Options include:

- Individuals taking responsibility for specific themes (e.g., AI policy, tech infrastructure, research workflows)
- Rotating scanning assignments (e.g., “one signal per person per quarter”)
- External partners (vendors, faculty, students) sharing periodic insights

5.1 BUILD AN EARLY WARNING SYSTEM - NEXT STEPS

Step 3: Track and Share

Create a shared space to log observations—this could be:

- A Google Sheet or Notion dashboard
- A dedicated Slack or Teams channel
- A page in your strategic planning dashboard

For each entry, include:

- A short description of the signal or event and any source (link or citation)
- Implications: Which scenario(s) does this relate to? Why does it matter?

Step 4: Make Time for Sensemaking

Build a cadence for reflection:

- Review signals quarterly in leadership or strategy team meetings
- Ask: Are we seeing movement toward any scenario? Are any assumptions changing?
- Use this as a checkpoint for adjusting strategy, resourcing, or messaging

5.2 MAKE ENVIRONMENTAL SCANNING A HABIT

Build awareness of change through shared observation and conversation

Environmental scanning is the practice of systematically observing the external world—watching for trends, emerging technologies, policy shifts, cultural signals, and other forces that might shape your organization's future.

While it's easy to get caught up in internal priorities, future-ready organizations develop a habit of looking outward. When scanning becomes a routine practice—not a one-time exercise—your leadership team builds a culture of curiosity, early insight, and strategic flexibility.

This activity encourages leaders to make scanning an embedded team ritual, supported by lightweight tools and inclusive participation.

When environmental scanning becomes a shared habit, your team becomes more attuned to change—and better prepared to respond with intention, not just reaction. It's one of the simplest and most powerful steps you can take to extend foresight into everyday leadership.

5.2 MAKE ENVIRONMENTAL SCANNING A HABIT - NEXT STEPS

Step 1: Choose a Format That Fits Your Context

You don't need a new committee. Build scanning into existing rhythms like monthly leadership meetings, quarterly planning check-ins and strategy retreat.

Use formats like:

- “Signal of the Month” spotlight
- “One article to share” roundtable
- “What’s shifting?” mini-brainstorm

Step 2: Assign Scanning Roles or Themes

Encourage individuals to bring insights from different domains including AI developments in education and research, higher education funding or policy shifts, social, cultural, or political trends and changes in research infrastructure and publishing

Optional: Assign “rotating scanners” each month—just one person responsible for bringing 2–3 noteworthy signals for group discussion.

5.2 MAKE ENVIRONMENTAL SCANNING A HABIT - NEXT STEPS

Step 3: Create a Shared Scanning Log

Keep a simple, visible record of interesting observations. This could be:

- A Google Sheet or Notion dashboard
- A running document with sections by theme or date

Include for each entry a headline or short summary, a source or link and some comments on relevance (e.g., Why might this matter to us?)

Step 4: Reflect, Don't Just Record

Make time in meetings to ask:

- What patterns are we noticing?
- Does this reinforce or challenge our current assumptions?
- What does this suggest we should explore or test?

Scanning is most valuable when it prompts conversation, not just collection.

5.3 CREATE FORESIGHT ROLES AND RITUALS

Normalize long-term thinking in leadership practice

For foresight to stick, it must be socialized—woven into the culture of how decisions are made, how teams meet, and how strategy is developed. One-off workshops are valuable, but they often fade unless accompanied by deliberate roles and repeated behaviors that sustain futures thinking over time.

This activity helps leadership teams design a few simple, repeatable practices (“rituals”) and assign light-touch foresight roles to create an environment where long-term thinking becomes normal—not exceptional.

These structures don’t require major resources. They require intentionality and persistence.

By creating light, repeatable foresight roles and rituals, your organization develops a resilient leadership culture—one that watches the horizon, adapts with intention, and makes decisions with the long view in mind.

5.3 CREATE FORESIGHT ROLES AND RITUALS - NEXT STEPS

Step 1: Designate a Foresight Role or Point Person

Assign someone on your leadership or planning team to:

- Keep track of signals, scanning summaries, or relevant trends
- Ensure foresight shows up on meeting agendas (even briefly)
- Act as a liaison with external trend monitors or foresight resources

This doesn't need to be a full-time role. A rotating “futures liaison” or “strategic foresight lead” every 6–12 months can work well.

Step 2: Establish Recurring Foresight Touchpoints

Choose one or two moments in your annual calendar to step back and reflect.

Examples:

- A “Futures Pause” in the spring or fall semester to review scanning insights and scenario alignment
- A 30-minute scenario test of new strategies at each strategic planning cycle
- A mini-retreat every 12–18 months to revisit scenarios or run a scanning update

5.3 CREATE FORESIGHT ROLES AND RITUALS - NEXT STEPS

Step 3: Add Futures Prompts to Existing Conversations

Insert a short set of questions into strategic conversations or decision points. For example:

- How might this initiative need to change by 2030?
- What happens if the future we expect doesn't arrive?
- What would we regret not exploring right now?
- Which scenario would this strategy thrive in—or fail in?

Add one of these to:

- Annual budget or hiring discussions
- Project design templates
- Capital planning or partnership evaluations
- Leadership retreats

5.4 REFRESH AND REVISIT SCENARIOS PERIODICALLY

Keep your strategic assumptions aligned with a changing world

Scenarios are not predictions. They are structured tools for thinking. But like any strategic asset, they need to be revisited and revalidated over time to remain useful.

What made sense a year ago may now seem off-track—or even closer to reality than expected. Revisiting your scenarios periodically helps you:

- Reflect on what's changed in the external environment
- Spot new drivers or emerging tensions
- Realign strategic direction with the realities unfolding around you

This is not about rewriting everything. It's about maintaining strategic relevance and situational awareness as conditions evolve.

A regular scenario refresh ensures that your long-term strategy is still anchored in relevant futures thinking. It builds organizational memory, encourages strategic humility, and strengthens your capacity to navigate complexity over time.

5.4 REFRESH AND REVISIT SCENARIOS PERIODICALLY

- NEXT STEPS

Step 1: Schedule Scenario Reviews Annually or Biannually

Pick a cadence that works for your leadership rhythm—every 12 or 18 months is ideal. Build it into strategic plan updates, offsite retreats or as a standalone exercise.

Make it a light touch, high insight session—no need to run the full workshop again unless you're ready to expand or reengage the organization.

Step 2: Use a Simple Scenario Check-In Framework

For each of the four scenarios, ask:

- Does this still feel plausible? More or less than before?
- Have any new events, trends, or signals aligned with this scenario?
- Do we see evidence of multiple scenarios unfolding at once?
- Which of our strategies are still resilient across these futures?

You might color-code or rate each scenario based on its perceived trajectory, salience, or strategic relevance.

5.4 REFRESH AND REVISIT SCENARIOS PERIODICALLY

- NEXT STEPS

Step 3: Identify Needed Updates or Additions

If your scenarios feel significantly out of sync, you may want to:

- Revise key drivers or assumptions
- Create a new “fifth” scenario based on fresh insights
- Run a mini-refresh workshop with a smaller group of leaders or planners
- Add wild cards, signals, or use cases to re-energize thinking

Don't assume your original framing will last indefinitely. Scenario thinking should grow with your institution.

Use your environmental scanning and early warning system activities as inputs to the scenario review.

Engage new voices (emerging leaders, students, partners) when you revisit to gain fresh insight.

Don't be afraid to retire a scenario that no longer feels relevant—but reflect on why this has happened.

5.5 INTEGRATE FORESIGHT WITH STRATEGIC PLANNING AND BUDGETING

Make long-term thinking a core input to near-term decision-making

Strategic plans and budget frameworks often operate on short timelines and fixed assumptions. But in a volatile and fast-changing world, that approach risks overconfidence in a single future.

Integrating foresight into these processes allows leadership teams to:

- Stress-test new initiatives before committing resources
- Identify actions that are robust across multiple futures
- Balance innovation, resilience, and risk
- Spot mismatches between resource allocation and emerging conditions

This activity offers ways to embed scenario thinking and futures literacy into existing planning and budgeting workflows—without starting from scratch. When foresight becomes part of how you plan and budget, your organization becomes more agile, more resilient—and more intentional about how it invests in its future.

5.5 INTEGRATE FORESIGHT WITH STRATEGIC PLANNING AND BUDGETING - NEXT STEPS

Step 1: Use Scenarios to Test Proposed Initiatives

When reviewing strategies, proposals, or major investments, ask:

- How would this hold up in each of our four 2035 scenarios?
- Which assumptions is this strategy built on? Are those stable or uncertain?
- Does this strategy make us more resilient—or more dependent—on a particular future?

Use the same rating system from earlier (1–5 scenario fit) or run a mini-wind tunnel session (see section 3.4).

Step 2: Align Budgets with Robust and Contingent Strategies

Use budgeting conversations to prioritize:

- Robust strategies that perform well across scenarios
- Contingent strategies that may need staged investment or flexible funding
- Watchpoints where funds could be released if certain signals emerge

Map strategic proposals to your scenario portfolio matrix (from Section 4.1) and impact/difficulty analysis (from Section 4.3) to guide resource decisions.

5.5 INTEGRATE FORESIGHT WITH STRATEGIC PLANNING AND BUDGETING - NEXT STEPS

Step 3: Add a Foresight Layer to Annual Planning

Insert a “futures lens” into:

- Annual planning templates (e.g., add one question: What future conditions would change this plan?)
- Departmental goal-setting
- Capital project evaluations
- Cross-functional strategy meetings

Create a norm where all strategic submissions consider long-term alignment—not just short-term feasibility.

Step 4: Use Scenario Frameworks for Risk and Resilience Reviews

At least once per year, convene leadership to ask:

- Which of our current strategies are most vulnerable in a disruptive future?
- Are we overcommitted to one set of assumptions?
- What hedges, options, or experimental efforts should we keep in play?

5.6 FOSTER A CULTURE OF FORESIGHT

Extend futures thinking into conversations, habits, and relationships

Foresight thrives when it's not confined to workshops or strategy documents—but instead shows up in how people think, collaborate, ask questions, and solve problems.

This activity offers a menu of lightweight, culture-building practices that signal to staff, faculty, and partners that your organization is serious about long-term thinking. These practices don't require major budgets or new roles. What they require is intentionality, leadership modeling, and repetition.

Over time, these behaviors can help turn foresight from an event into a mindset—from something a few people do into something everyone values.

When foresight shows up in conversation, design, learning, and partnership, it becomes part of your institutional identity—not a separate agenda, but a mindset for how you lead in an uncertain world.

What follows are small moves can be adopted one at a time. Choose what fits your team, timing, and culture—and experiment.

5.6 FOSTER A CULTURE OF FORESIGHT - NEXT STEPS

1. Host a Quarterly “Signal Spotlight”

Invite one or two staff members, students, or external partners to share a trend, tech, policy shift, or cultural signal that may shape the future of research, learning, or libraries. Allow 15–30 minutes in a regular meeting.

Ask:

- Why does this matter?
- What assumptions does it challenge?
- Which of our scenarios does it resonate with?

2. Launch a Futures Learning Circle or Book Club

Choose readings—books, articles, reports—on topics like AI, higher ed futures, digital ethics, design, or strategic foresight. Meet every 6–8 weeks. Use simple prompts like:

- What surprised you?
- What should we rethink in our current strategy?
- What futures does this invite us to consider?

5.6 FOSTER A CULTURE OF FORESIGHT - NEXT STEPS

3. Develop a “Futures Briefing” Process

Create a 1–2 page update every quarter (or twice a year) that summarizes:

- Key trends or events on your radar
- Implications for your library, university, or users
- One scenario that feels newly relevant
- Questions for leadership reflection

Use this as a lightweight input to retreats, donor meetings, or planning sessions.

4. Engage Campus Partners in Scenario Thinking

Adapt the toolkit for use with:

- Academic departments and research centers
- Student leadership
- Faculty committees

Co-run short scenario discussions or scanning workshops with your campus partners. Use this to build shared mental models and strengthen alignment.

5.6 FOSTER A CULTURE OF FORESIGHT - NEXT STEPS

5. Use Futures Questions in Hiring, Retreats, or Design Work

Integrate long-range thinking into everyday choices. Examples:

- Ask job candidates: “What’s a technology you think will change this field in 10 years?”
- In service design: “If this system still exists in 2035, will it serve us well?”
- In retreats: “What would we regret not experimenting with now?”

These questions signal values, build curiosity, and support strategic awareness.

Across all of these ideas:

Start with one practice and try it three times—repetition builds comfort

Invite participation across levels and roles—make foresight inclusive

Highlight when someone brings a “future-focused” question or idea—model and reward the behavior

REFERENCES

<https://pubmed.ncbi.nlm.nih.gov/10132155/> Hancock and Bezold, 1994