



INSPIRE REPORT

The Lux Human-Centric Innovation Model



Marisa Kopec
President

Foreword

Inspire Reports are an exclusive deliverable of Lux Research and Advisory Services. The genesis of why we created these Inspire Reports was to inspire, illuminate, and ignite your thinking.

At Lux, our research focuses on our clients' top priorities and key initiatives, helping them navigate today's central dilemma: balancing profitability with corporate sustainability goals.

These reports provide insights, frameworks, and recommendations that clarify your company's innovation paths and support confident decision-making.

Clarity

These reports address executive, C-suite, and board-level discussions related to sustainability and carbon neutrality. We place technology in the context of these incredibly daunting business issues you are trying to solve.

Performance

Lux has the most powerful network of innovators in the world across energy, manufacturing, and consumer packaged goods. These reports bring forward this cross-industry knowledge, enabling you to tap into our experience and learnings from working in that ecosystem and supporting best-in-class leaders to drive higher performance of your own teams.

Trust

Executives trust Lux's research because it follows a rigorous methodology and peer-review process, ensuring confidence in critical business decisions. These are not just reports or "content" — they are vetted, tested, and peer-reviewed research and analyses.

I hope you find our Lux Inspire Reports inspiring and helpful to support the conversations, thinking, and decisions you make every day to grow your company and solve for sustainability, carbon neutrality, and the long-term resilience of your business.

Change the world.



Marisa Kopec

President



Introducing the Lux Human-Centric Innovation Model

The next era of innovation requires collaboration and alignment across functions within an organization.

Innovation Fails When It's Technically Right but Humanly Wrong.

The days of R&D or open innovation teams working in isolation in laboratories or conference rooms are over. Financial governors, influenced by investors through stock price pressures or private equity frameworks, no longer allow for the kind of “wasted” spending or time that innovation teams once used to explore esoteric inventions not centered on material financial outcomes.

Traditional R&D and market research functions are becoming outdated, and the innovation leaders of the future must determine how to extract the most valuable elements of these disciplines and weave them into new processes and organizational structures. This transformation is taking place amid unprecedented digital- and AI-driven change and under financial scrutiny unlike anything experienced before.

The mission of this Inspire Report is to help leaders rethink how work gets done within their organizations and drive the alignment needed among innovation, marketing, and business units. The goal is to connect the organization end to end across the innovation and go-to-market processes. Technology-centric innovation strategies no longer work. It is time to flip the paradigm, even for B2B companies, and put people, referred to as buyer audiences or consumers, at the beginning of the innovation ideation process.

This framework provides innovation leaders a tool to evaluate their organization's performance across each step of the process, identify areas for process improvement, and strengthen alignment both within teams and across functions to drive greater efficiency and more productive outcomes.



Framework Overview

The Lux Human-Centric Innovation Model consists of three innovation and go-to-market life cycle phases: *Inspire*, *Illuminate*, and *Ignite*.

Each phase includes activity-based stages that, when executed well, drive customer-centric innovation strategies that are both technically feasible and emotionally compelling. The model enables businesses to generate revenue by delivering timely products and solutions that customers truly need or want.

The model outlines a business process that runs parallel to a company's technology or product development. It doesn't replace existing systems but complements them as an integrated layer that enhances traditional stage-gate or agile approaches.



Inspire

Discover and define opportunities that are technically possible and emotionally inevitable.



Illuminate

Build organizational belief, alignment, and a clear business case for innovation.



Ignite

Bring ideas to life through validation, piloting, and commercial launch.

Discovery	Opportunity Analysis	Ideate	Concept Shaping	Narrative	Legal and Regulatory	Innovation Roadmap	Business Case	GTM Strategy	R&D/Lab Validation	Partners and M&A	Pilot	Commercial Release	Optimize
Identify new demand spaces; finding new technologies that create opportunity or signal risk	Gauge magnitude and timing of market potential; isolating and prioritizing buyer audience needs	Understand how white space aligns to existing capabilities and strategy uncovering any blind spots	Validate the concept through theoretical sketches and qualitative research (proof of concept)	Craft the story that your key internal stakeholders get behind and believe in	Assess regulatory and policy risks, understand IP, and NDA needs and any potential legal boundaries	Devise organic or inorganic paths for activating the innovation (product and messaging) vision	Make a strong justification for investments in innovation for growth	Devise the campaign, marketing as well as sales and channel strategies	Test and validate the solution	Search and select the right partner that brings critical strengths you need	Develop prototypes and figure out how to scale the solution (minimally viable product)	Final business plan is approved triggering successful product launch or technology deployment	Find ways to maximize growth into adjacencies/new markets via product updates or refreshed campaigns/promotions.

Marketing (Insights)

Jobs to be Done	Trend & culture scanning	Market sizing & segmentation	Concept framing	Concept validation testing	Internal storyboard	Claims & compliance review	Market timing prioritization	Market justification	Messaging & positioning	Consumer testing	Channel partnerships	Launch planning	Launch activation	Market monitoring
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Innovation (R&D)

Jobs to be Done	Technology scouting	Feasibility assessment	Capability alignment	Early technical modeling	Innovation visioning	IP & regulatory mapping	Technical roadmap planning	Risk-adjusted valuation	Proof-point development	Prototype validation	Technology partnerships	Pilot execution	Scale-up & deployment	Continuous improvement
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In the following pages, we break down the three phases of the Lux Human-Centric Innovation Model.

Inspire

The Inspire phase focuses on discovering and defining opportunities that are both technically possible and emotionally inevitable.

This is where innovation begins, guided not by internal capabilities but by unmet human needs and shifting market realities.

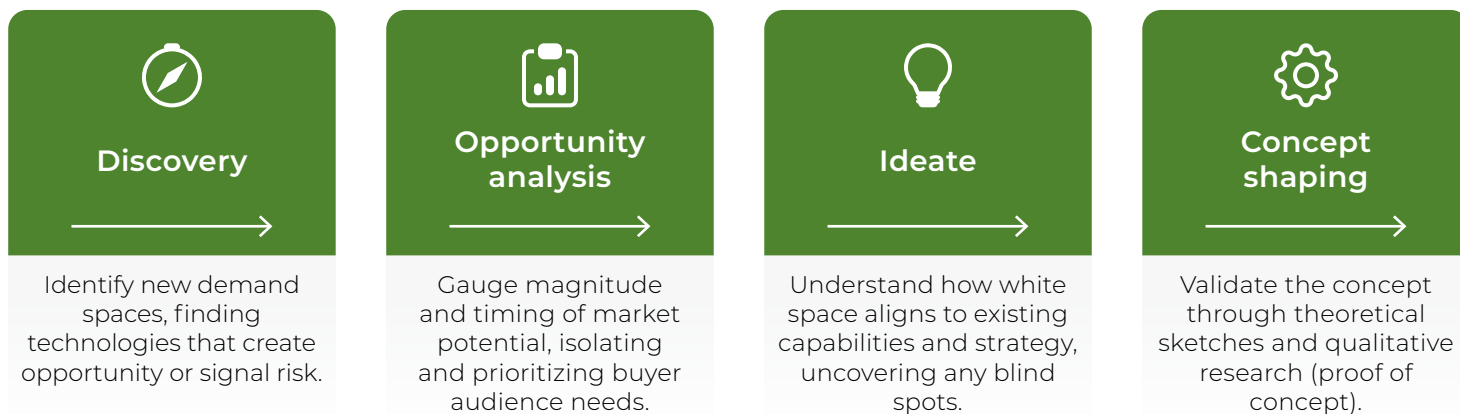
Early in the process, teams are not validating technologies but shaping concepts. This involves hypothesis building, conceptual modeling, and paper-based validation that blend insight-driven foresight with creative exploration. We observe the most effective innovators continuously test and refine their assumptions, knowing that discovery is iterative, not linear.



The output of the *Inspire* phase is a clearly defined opportunity:

A market need, an early concept, and a first understanding of the potential value. That opportunity sets the foundation for the next phase by clarifying where the organization should compete and which human problem it aims to solve.

ACTIVITY-BASED STAGES



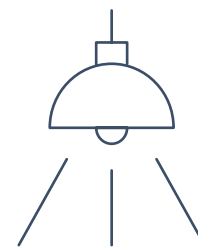
Lux Recommendation:

Best practices show that this stage works best when organizations widen their lens beyond their traditional customer base or known markets. Many teams struggle with myopia, looking only within their familiar categories, channels, or existing business lines. Lux recommends an intentional effort to explore adjacent and emerging spaces where disruption may occur.



Illuminate

The Illuminate phase builds the narrative and organizational momentum that turns ideas into funded, supported innovation initiatives.

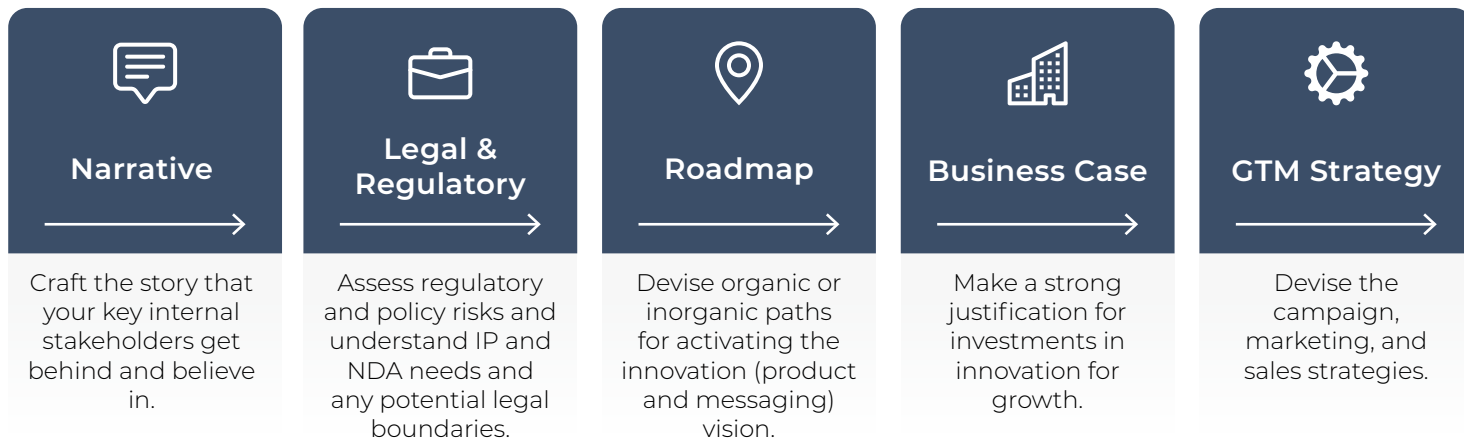


At its core, Illuminate is about alignment — helping the organization understand the “why,” “what,” and “how” behind an innovation effort.

This phase includes developing the business case, crafting the strategic narrative, and defining clear metrics for success. Leading organizations apply frameworks such as desirability, feasibility, and viability to evaluate ideas holistically, ensuring they are not only technically and financially sound but also resonate with the people who will buy, use, and support them.

The Illuminate phase often runs in parallel with early development work, allowing financial modeling and stakeholder alignment to evolve alongside technical exploration. It is also where internal alignment between innovation, marketing, and the business units becomes essential. The result is a shared roadmap, clear investment priorities, and a story the organization can rally behind.

ACTIVITY-BASED STAGES

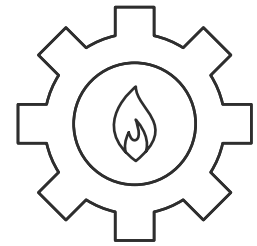


Lux Recommendation:

Effective innovators treat storytelling as a leadership discipline. We advise that you not only communicate the data and strategy but also ensure your business case and narrative connect emotionally with decision-makers, customers, and teams to build belief in the path forward. Building social capital across the organization is often what determines whether innovation gains traction or stalls.

Ignite

The Ignite phase brings ideas to life. It moves innovation from concept to market through validation, piloting, partnerships, and optimization.

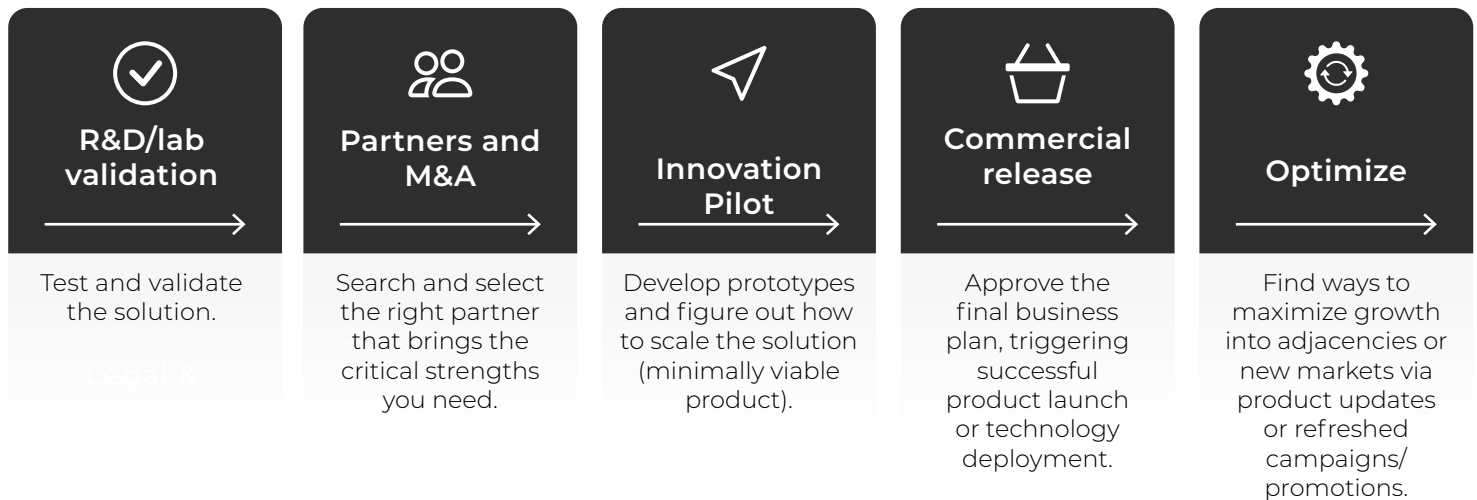


This is where theory becomes tangible, and strategy meets execution.

Leading organizations approach Ignite as an integrated process that connects technical validation, market testing, and customer co-creation and establishes pathways from laboratory proofs-of-concept through pilot-scale testing to full commercialization. In some cases, the process builds application development capabilities that allow companies to prototype solutions in real-world conditions, strengthening credibility with customers and accelerating adoption.

The output of Ignite is a market-validated product, service, or solution that delivers measurable value. It also produces the feedback, data, and learning that inform future opportunities, ensuring the innovation cycle remains dynamic and human centered.

ACTIVITY-BASED STAGES







Lux Recommendation:

Partnerships are a critical success factor in this phase. We recommend focusing on collaboration with startups, suppliers, and research institutions that can close capability gaps, accelerate time to market, and open new avenues for growth. Leading innovation teams also demonstrate a strong capacity to learn and adapt — treating each pilot and launch as opportunities to generate insights that feed back into the Inspire phase, creating a continuous cycle of improvement. We further recommend adopting an agile, iterative approach that embeds structured, closed-loop learning sessions within the workflow to ensure teams are continuously reflecting, learning, and enhancing their performance.

The Lux Human-Centric Innovation Model Snapshot

This snapshot is based on our primary research with Chief Technology Officers, Innovation Leaders, Heads of Insights, and Marketing leaders.

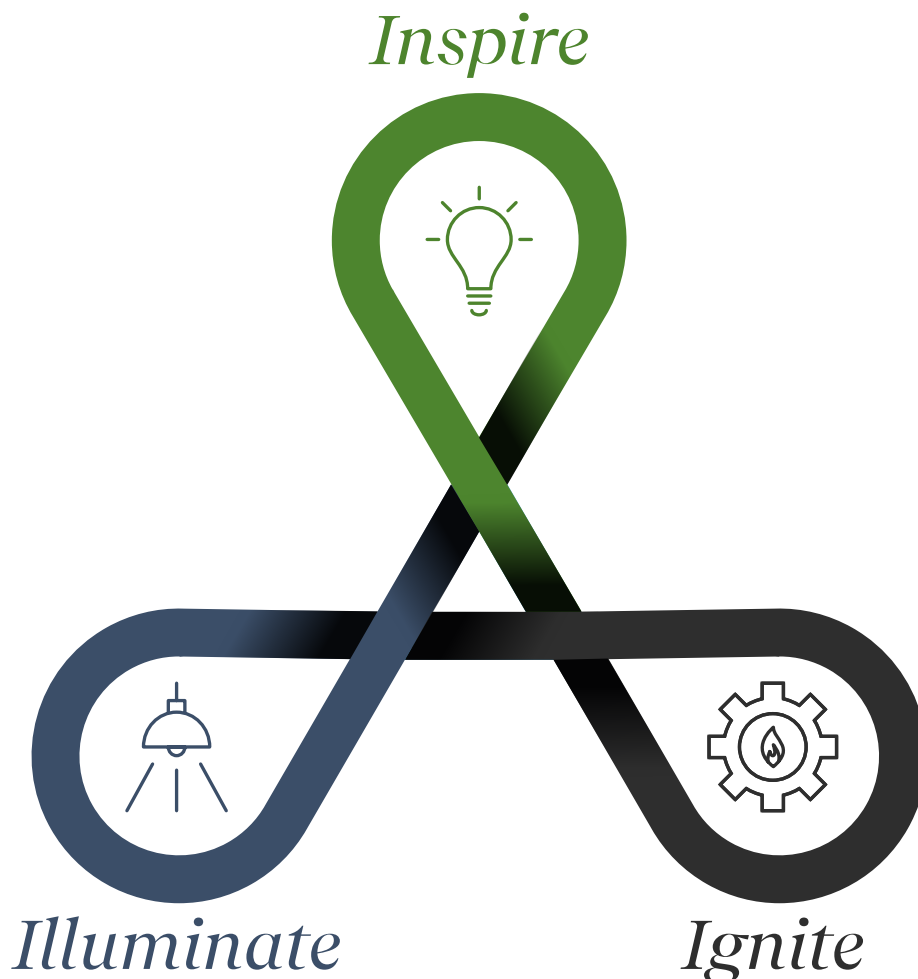
Use it as a guide or template that can be customized to fit your team's specific process guidelines or serve as a quick reference tool.

	 Purpose	 Key Activities	 Best Practices	 Outputs
<i>Inspire</i>	<p>Discover and define opportunities that are technically possible and emotionally inevitable.</p>	<p>Discovery, foresight, opportunity analysis, concept shaping</p>	<p>Expand perspective beyond known markets. Use insights and foresight to uncover unmet human needs. Treat exploration as iterative, not linear.</p>	<p>Defined opportunity, early concept framing, initial understanding of market and human needs</p>
<i>Illuminate</i>	<p>Build organizational belief, alignment, and a clear business case for innovation.</p>	<p>Storytelling, business case development, stakeholder engagement, roadmap creation</p>	<p>Use storytelling to build emotional and strategic buy-in. Apply desirability-feasibility-viability frameworks. Align innovation, marketing, and business units early.</p>	<p>Shared narrative, aligned roadmap, clear investment priorities supported by leadership</p>
<i>Ignite</i>	<p>Bring ideas to life through validation, piloting, and market launch.</p>	<p>Prototyping, piloting, partnerships, commercialization, feedback loops</p>	<p>Integrate technical and market validation. Collaborate with partners to fill gaps and accelerate progress. Build feedback loops to continuously improve and inform the next cycle.</p>	<p>Market-validated product or service, performance data, learning that fuels the next round of innovation</p>

Innovation Is Circular and Iterative, not Sequential

Lux Research recommends that organizations evolve beyond traditional, sequential stage-gate processes toward a more hybrid approach that blends structure with flexibility.

Stage-gate frameworks provide important discipline and risk management, but they can unintentionally slow learning and limit adaptability if applied too rigidly.



A hybrid model preserves the rigor of stage-gate governance while integrating iterative, feedback-driven practices. Teams develop business cases, validate technology, and align stakeholders in parallel — not sequentially — and use phase-specific checkpoints to reflect, learn, and adjust course.

Leading innovation organizations incorporate structured “learning loops” after key milestones to capture insights from pilots, customer testing, signals of shifts in consumer needs, technological breakthroughs, and commercialization activities. These learnings are then fed directly into the Inspire phase, closing the loop and ensuring the next cycle begins with greater clarity and foresight.

Lux Research advises clients to adopt this approach incrementally, introducing iterative methods within existing frameworks rather than replacing them outright. Over time, this balance of discipline and agility builds stronger innovation muscle memory, accelerates decision-making, and enables organizations to adapt to changing markets while maintaining operational control.

Bringing Iteration into Stage-Gate Environments

To evolve historically sequential processes into adaptive systems, Lux recommends the following actions to transform your innovation processes:



1

Embed feedback loops:

Create checkpoints within each stage where insights from pilots, customer testing, or stakeholder feedback are used to revisit earlier assumptions. This can be formalized through recurring “learning reviews” rather than traditional “gates.”



2

Run parallel tracks for business and technical validation:

Drive market validation, business case modeling, and prototype development concurrently. This process maintains momentum and prevents bottlenecks created by waiting for one stream to finish before the next begins.



3

Shift from a stage-gate mindset to a decision-gate approach:

Instead of treating gates as stop-and-start barriers, use them as reflection points for recalibration, integrating new data or adjusting direction without halting progress.



4

Institutionalize closed-loop learning:

Incorporate structured sessions after each launch or major milestone to document learnings and feed them directly into future Inspire activities. This ensures the process remains circular and continuously improving.



5

Adopt hybrid frameworks:

Combine stage-gate discipline (for risk management, traceability, and governance) with agile practices (for experimentation, iteration, and adaptability). Some organizations have achieved this by layering design thinking and agile sprints within traditional stage-gate frameworks.

Lux Take:

The strongest organizations treat innovation as a living, cyclical system, not as a series of gates to clear. By introducing structured feedback loops, running processes in parallel, and blending agile and stage-gate principles, they create a hybrid model that maintains rigor while enabling flexibility and continuous learning.



Modernizing the System to Track Innovation Progress

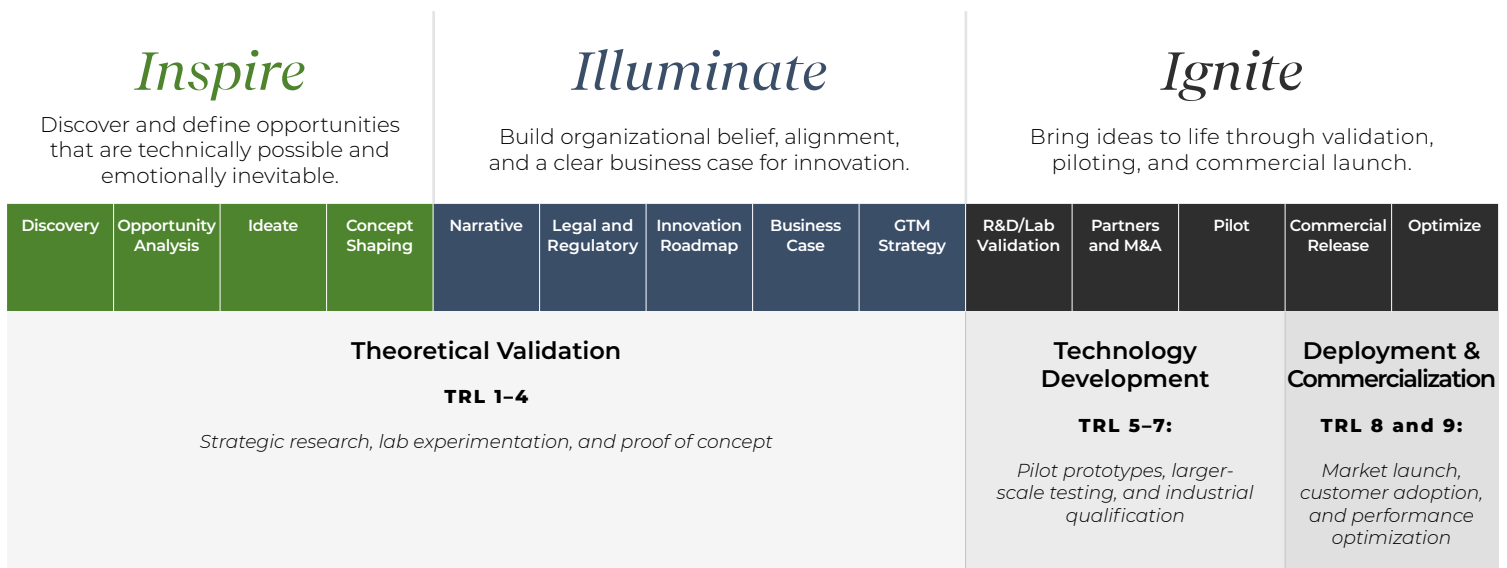
Lux Research recommends positioning the Lux Human-Centric Innovation Model as a complementary layer that enhances traditional technology readiness level (TRL) benchmarks.

TRL remains essential for ensuring technical readiness, but the Lux model provides the strategic and human contexts that connect technical progress to market success.

To modernize TRL-based innovation systems, Lux Research advises organizations to:

1. Integrate commercial and human insight milestones alongside technical readiness gates.
2. Adopt parallel workflows that link R&D, marketing, and business functions early in development.
3. Establish structured feedback loops that feed learnings from later TRL stages back into the Inspire phase.
4. Use risk-adjusted metrics that balance technical advancement with business confidence and customer relevance.

By layering the Lux Human-Centric Innovation Model onto established TRL measures, organizations maintain the rigor of technical validation while gaining the agility and adaptability required to compete in a modern innovation landscape.



The graphic above illustrates how the Lux Human-Centric Innovation Model aligns with traditional TRL stages. Each phase — Inspire, Illuminate, and Ignite — maps directly onto the progression of technical maturity, demonstrating how human, strategic, and commercial considerations build

alongside technological development. The graphic highlights how organizations can move beyond viewing TRL as a purely technical metric and instead use it as part of a connected system that supports end-to-end innovation, from early insight and opportunity definition to full market deployment.

Aligning the Lux Human-Centric Innovation Model with TRL stages

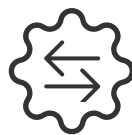
Lux Research has found that many organizations continue to rely only on TRL as a structured metric for managing technical progress.

However, most are now evolving innovation systems to better integrate business strategy, market validation, and human-centric insights. This modernization aligns closely with the Lux Human-Centric Innovation Model, which connects technical maturity with commercial and organizational readiness.



Using TRL as a technical measure within broader innovation cycles

Lux Research discovered that TRL remains a valuable tool to track the progression of technology — from initial proof of principle through commercialization — but it often functions in isolation from business and market contexts. In practice, TRL 1–4 typically represent strategic research and laboratory validation, TRL 5–7 correspond to pilot-scale development and proof of feasibility, and TRL 8 and 9 reflect deployment and commercialization, where market testing and scaling occur.



Integrating TRL with the model

We have observed that best-in-class innovators are now aligning their TRL stages with the three phases of the Lux Human-Centric Innovation Model. Inspire and Illuminate align with TRL 1–4, where early research defines opportunity and direction and combines technical validation with storytelling, business case development, and stakeholder alignment. Ignite corresponds to TRL 5–9, where piloting, commercialization, and continuous learning take place. This approach moves TRL from the main indicator of technical maturity metric into a broader cross-functional innovation system.



Modernizing a system for innovation progress

Lux found that organizations are moving away from using only TRL as the main gauge of whether their innovation is progressing. Modern innovators are embedding parallel workflows that connect R&D, marketing, and business functions throughout the process. Teams are introducing risk-adjusted metrics that evaluate not only technical maturity but also commercial viability and customer desirability. This ensures that progress is measured in terms of readiness for both the market and the organization, not just technological achievement.



Shifting from a stage gate to a learning gate

We also identified a shift from traditional stage-gate reviews to learning-based checkpoints. These “learning gates” encourage teams to reflect, adapt, and integrate new insights rather than treating each gate as a fixed go/no-go decision. This mindset allows TRL-based processes to remain flexible, aligning better with today’s faster, more adaptive innovation cycles.

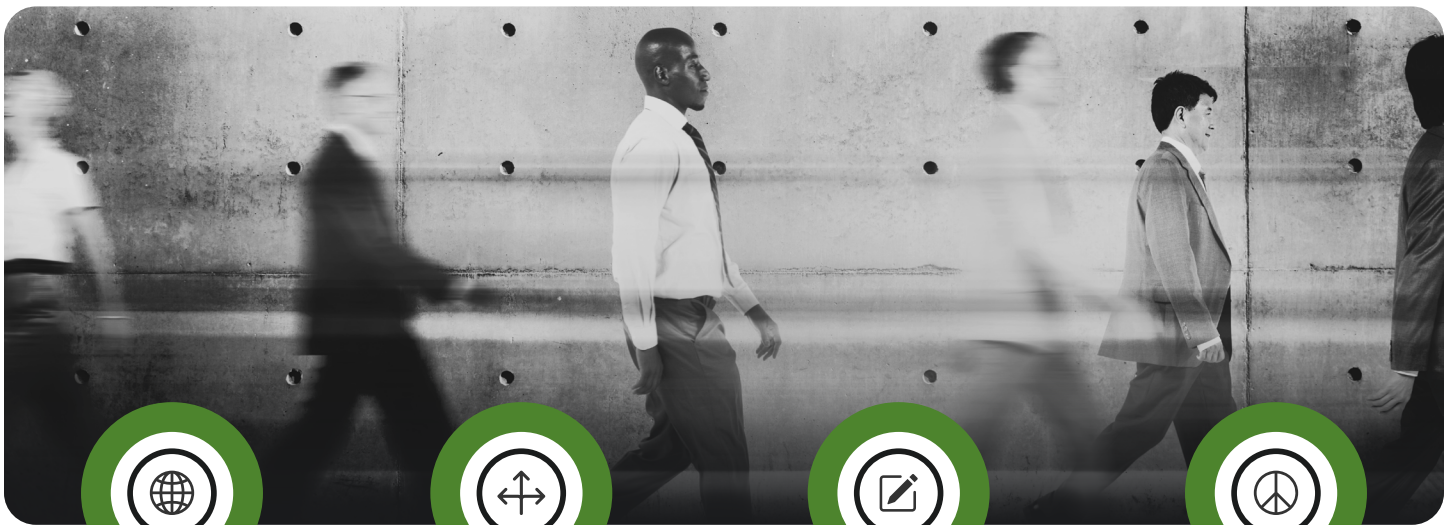


Why the call to re-focus on human-centric innovation?

Humans buy products.

Whether your offering is B2B or B2C, people ultimately make the purchasing decisions.

At the heart of any successful innovation strategy is the correct definition of the market, an understanding of buyer audiences, and clear identification of consumers and their needs. Without a deep understanding of these human elements, even the most technologically advanced products will struggle to succeed.



Innovation is a human ecosystem

The workflows that create IP, invent new products, and develop business models are fundamentally human operations. These processes require insights tailored to how people do their jobs and collaborate. Ignoring the human aspect of innovation means overlooking the very ecosystem that drives creativity and progress.



Humans make decisions

Sixty percent of an innovation leader's role is storytelling. The ability to influence the mindsets of people within your organization toward desired decision outcomes is often the difference between success and failure. It is not just about data; it is about shaping narratives that resonate with human emotions and intellect.



Human creativity fuels primary research

Spreadsheets and AI can support decisions grounded in existing research, but only humans can generate primary research that explores possibilities beyond the data — applying contextual foresight to envision innovations that transcend what's mathematically predictable.



Humanity matters

Ethical, well-informed innovation decisions drive financial growth, but they must also address risks to people and the planet. Innovation that overlooks human impact is inherently unsustainable. Striking the right balance between profitability and ethics relies on human judgment.



The Strategic Value of Human-Centric Innovation

Human-centric innovation is not a slogan; it is a proven strategy for creating products and services that people truly want to buy.

Lux emphasizes that all innovation, whether in B2B or B2C markets, must remain grounded in a deep understanding of human needs, behaviors, and aspirations.

This principle is especially critical for B2B organizations that have traditionally focused on technical performance rather than human experience. Even if a company does not sell directly to consumers, its products end up in the hands of people or in some way serve human needs, cultures, and societies. Understanding the end-user's motivations and preferences allows businesses to anticipate what their customers' customers will value, creating a competitive advantage that extends across the value chain.

For suppliers, this shift in perspective can transform the nature of customer relationships. Instead of simply responding to procurement requests, organizations can bring proactive ideas — new product concepts, material innovations, or performance enhancements — that help their customers grow. By contributing to their customers' innovation agendas, suppliers elevate their position from vendor to strategic partner. The further upstream they are embedded in the innovation process, the stronger and more durable those relationships become.

Ultimately, human-centric innovation enables entire ecosystems to create offerings that align with what people need and desire at the right time. When every participant in the value chain understands and designs for the human experience, the outcome is more than a successful product; it is a shared pathway to growth and relevance in an increasingly interconnected market.



Lux Take:
Human-Centric Innovation Is
More Important Than Ever.





About Lux

Lux Research fuels innovators to not only imagine what's possible in the future but also operationalize innovation success in the near term. We deliver research and advisory services to inspire, illuminate, and ignite innovative thinking that reshapes and grows businesses. Using quality data derived from primary research, fact-based analysis, and opinions that challenge traditional thinking, our experts focus on finding truly disruptive innovations that are also realistic and make good business sense.

The “Lux Take” is trusted by innovation leaders around the world, many of whom seek our advice directly before placing a bet on a startup or partner — our clients rely on Lux insights to make decisions that generate fantastic business outcomes. We pride ourselves on taking a rigorous, scientific approach to avoid the hype and generate unique perspectives and insights that innovation leaders can't live without.

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