# Cross-Industry Innovation for Future Business Ecosystems

Cross-industry innovation is becoming a make-or-break factor for companies to further thrive and create value. With our foresight expertise, we help companies and organizations to identify their cross-industry innovation potentials and take the right steps to find their roles in future business ecosystems.

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## Joining forces unlocks significant values.

In a world that is characterized by rapid technological advancements, mounting and interconnected risks, and global challenges that call for bold actions, businesses need to deal with a stark choice: thriving through cooperation or risking to become less competitive.

This new reality makes cross-industry innovation – processes where businesses collaborate beyond traditional sector boundaries – a strategic advantage for businesses to expand their own innovation portfolio. By embracing cross-industry innovation, they can navigate complexity, accelerate growth, and create resilient ecosystems that enable systemic solutions, which can hep to address broad social and market needs.

As companies move into co-creation, they tap into transformative opportunities that individual players cannot achieve alone. Cross-industry innovation involves the fusion of ideas, practices, and technologies from players from diverse industries to jointly generate novel solutions, products, or services.

### Creating transformative business opportunities
Cross-industry innovation enables businesses to tap into diverse insights, reshaping how they create value. By combining competences from different sectors and players, companies can form collaborative ecosystems that expand possibilities for value creation.

### Improving resilience
Many companies are sitting in the same boat and are facing the same future risks. With cross-industry innovation, companies can jointly develop more robust systems by combining unique and shared perspectives and resources to address complex challenges more effectively.

### Fostering foresight and innovation mindsets
By collaborating with players from diverse fields, companies gain new insights and can learn from each other's experiences, enabling them to anticipate and adapt to changes more effectively – helping to sustainably boost foresight and innovation mindsets by harnessing shared future perspectives, open discussions, and continuous learning.

# Two strategic perspectives of cross-industry innovation.

When looking at the "WHY" of cross-industry innovation, there are two important perspectives that also match its key values: creating transformative business opportunities and increasing resilience. There is no "either or" or "right or wrong". Both perspectives are crucial for players from all sectors alike and can both be addressed in parallel*.

**Risks Perspective** — **Being impacted** — **Cross-Industry Innovation** — **Making Impact** — **Opportunities Perspective**
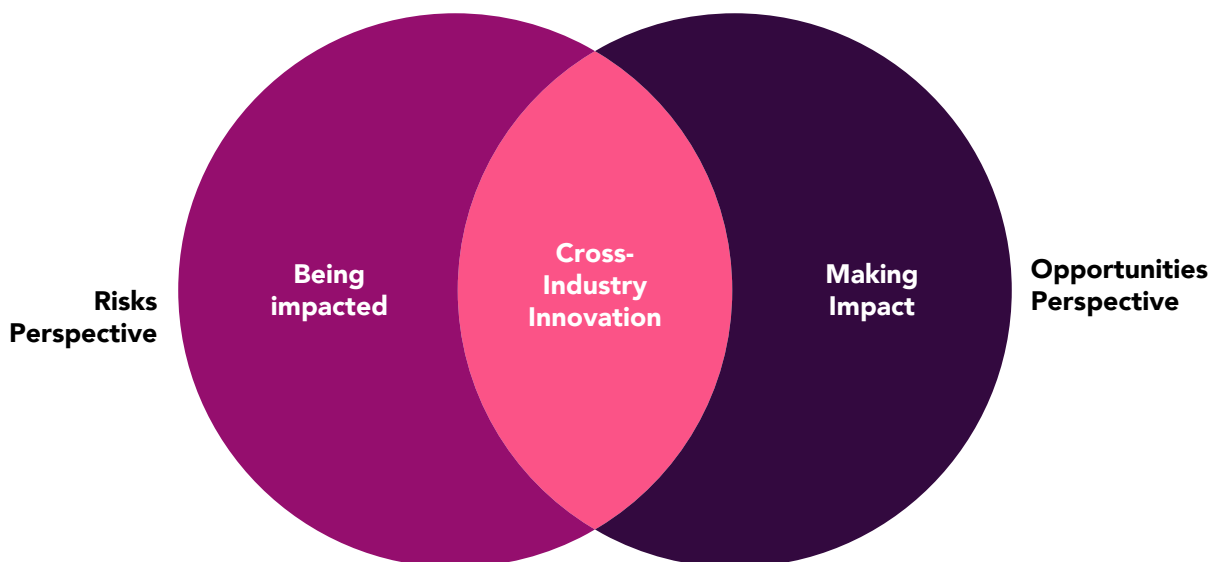
### Being impacted: risks perspective
Players collaboratively identify and explore potential risks that could impact their operations, value chains, products, and even core functions like HR. Such collaborative risk assessments allow businesses to better understand vulnerabilities across sectors and ecosystems and to develop resilient and more adaptive solutions together.

### Making impact: opportunity perspective
Cross-industry innovation is also about creating new business opportunities that can help to address global challenges and enhance societal and environmental well-being. By combining insights and individual competences, businesses can innovate solutions and start forming ecosystems that can't be achieved by single companies alone.

*When companies jointly explore specific future developments from a foresight perspective, they can identify impacts across both risk and opportunity dimensions. For example, players in the energy and mobility sectors face shared risks from climate change, necessitating climate adaptation strategies. At the same time, these sectors can collaborate to create impactful solutions, such as decentralized renewable energy systems where vehicles serve as temporary energy storage units. This approach not only mitigates risks but also leverages their combined strengths to address climate challenges, benefiting the broader ecosystem and contributing to sustainability.

# Two approaches of cross-industry innovation.

Cross-industry innovation processes, particularly when focused on creating value within future business ecosystems, can unfold in two different ways. Both approaches can function independently or can be combined, with the first , "Visioning", often serving as a foundation for the second, "Strategizing" - allowing businesses to establish a strong thought and idea base and then leverage it to explore more complex, value-generating opportunities within interconnected ecosystems or joint innovation initiatives.

## Approach 1: „Visioning"*

This approach is about creating shared visions about the future and how transformative future changes could have an impact on possible joint future actions and business ecosystem potentials.



1. Competence Mapping
2. Future Exploration
3. Impact Assessments
4. Ecosystem Potentials
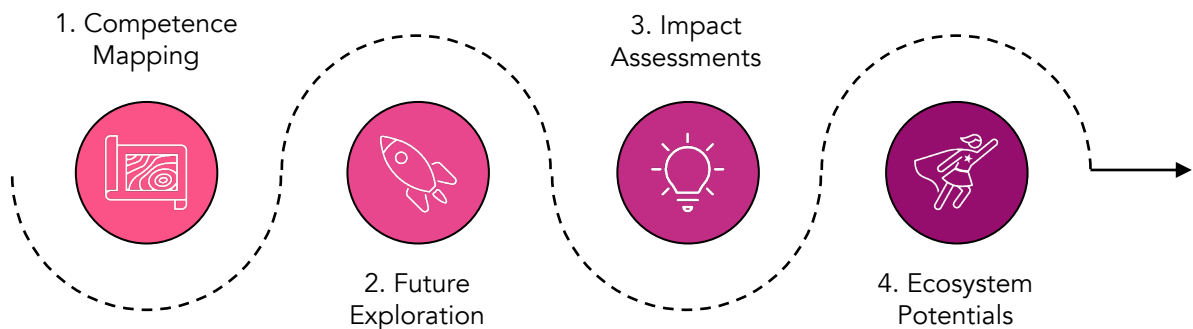
**01** **COMPETENCE MAPPING:** With the help of interviews, individual competence maps and a joint competence map of the involved partners are created as the basis for future innovation.

**02** **FUTURE EXPLORATION:** We share future perspectives and jointly identify relevant paradigm shifts and key changes in selected sectors, markets and value creation areas of the future.

**03** **IMPACT ASSESSMENTS:** We systematically identify overarching strategic impacts for the partners along the risks and opportunities perspectives.
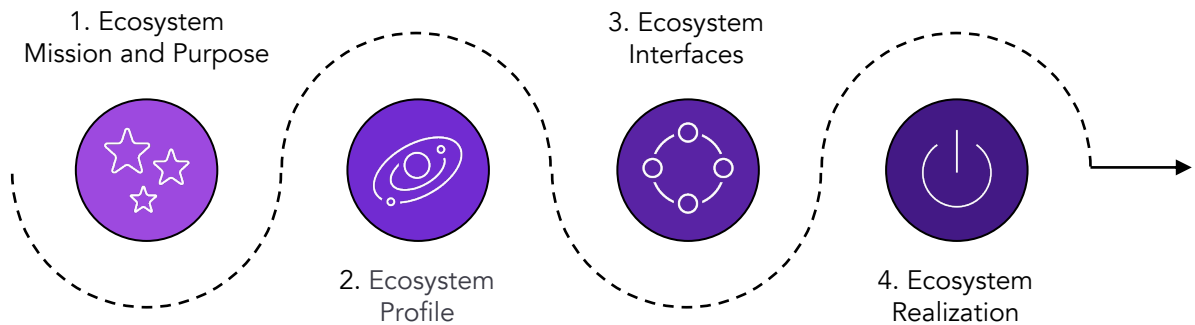
**04** **ECOSYSTEM POTENTIALS:** We jointly prioritize the most promising cross-industry ecosystem initiatives, where the partners can contribute best with their competences.

*Although the greatest value emerges when multiple partners engage in this process collaboratively, there are also significant advantages for individual companies undertaking it independently before opening up to others. By first identifying relevant future actions internally, companies can better determine where cross-industry innovation and potential ecosystem partnerships are most beneficial. This preliminary work also clarifies their potential role within future ecosystems, positioning them to approach partnerships strategically and align with the most suitable collaborators.

## Approach 2: „Strategizing"*

This approach is about pushing forward and realizing joint initiatives and ecosystems in pre-selected (e.g. as an outcome from approach 1, "Visioning") future topics, e.g. a transformational growth market.



**1. Ecosystem Mission and Purpose**

**2. Ecosystem Profile**

**3. Ecosystem Interfaces**

**4. Ecosystem Realization**

**01**   **ECOSYSTEM MISSION AND PURPOSE:** With the foresight and partner perspective, we jointly formulate the purpose of the ecosystem and market needs.

**02**   **ECOSYSTEM PROFILE:** We explore potential market segments and innovative system solutions to successfully address critical future needs and requirements.

**03**   **ECOSYSTEM INTERFACES:** We think through the value chain, the business models and interfaces between the involved companies.

**04**   **ECOSYSTEM REALIZATION:** Together, we define innovation projects and first pilot projects in order to drive and realize the ecosystem.

## Value Creation Areas as Sources for Cross-Industry Innovation.

To systematically identify joint future initiatives and potential ecosystems, starting with value creation areas is highly effective. By selecting the most significant areas from a shared perspective – based on competencies and strategic orientations – partners can engage in focused explorations of relevant futures. This process opens the door to what truly matters for each company individually and for the ecosystem.

# VALUE CREATION AREAS

Companies around the globe are facing changing challenges and new business opportunities within these fields up to 2035 and beyond.



| BIOSPHERES | ATMOSPHERES AND CLIMATE | NATURAL RESOURCES | HEALTH | NUTRITION | ENERGY | SECURITY |
|---|---|---|---|---|---|---|
| MATERIALS | MANUFACTURING | INFRASTRUCTURES AND CITIES | HOUSING | LIVING | COMMUNICATION | MOBILITY |
| TRANSPORTATION | BEAUTY | EDUCATION | WORK | PLEASURE | SPIRITUALITY | FINANCE |

# Examples of Future Cross-Industry Ecosystems

## Post-Disaster Rescue and Clean-Up

- **Emergency response services:** Coordinate rescue efforts, deploy medical personnel, and assess on-ground needs. Operational leaders in saving lives and reducing hazards.

- **Logistics companies:** Provide resources like helicopters, drones, and trucks to move supplies, personnel, and equipment quickly and efficiently, ensuring swift delivery of aid in challenging conditions.

- **Tech companies:** Establish rapid communication networks in affected areas using satellite technology and portable cell towers, enabling coordination among various rescue teams and improving situational awareness.

## Urban Food Systems

- **Agritech companies:** Provide innovative solutions for urban agriculture like vertical farming, hydroponics, and rooftop greenhouses.

- **Utilities:** Supply essential services to support urban agriculture, e.g. waste management companies can contribute by converting organic waste into compost or bioenergy, creating a closed-loop system.

- **Urban planning authorities:** Incentives to integrate food production into urban planning and coordinating logistics, enabling efficient transport of food to local canteens, supermarkets, and other distribution points.

## Circular Bioeconomy

- **Chemical and construction companies:** Using biogenic and technical carbon in manufacturing materials like bioplastics, bio-based chemicals, and sustainable building materials.

- **Biomass suppliers and agricultural producers:** Provide raw materials, such as agricultural residues, forestry by-products, and purpose-grown biomass, essential for renewable carbon production.

- **Certification bodies and data analytics providers:** Ensure trust and transparency in the circular bioeconomy ecosystem by certifying renewable carbon sources and providing data on carbon traceability.

## Intelligent Manufacturing Hubs

- **Connectivity and AI platform providers**: Provide data exchange and analysis tools that allow for self-organized configuration and optimization of orders within production, warehouse and external contract-suppliers – connecting internal and external systems of systems.

- **Automation companies:** Supply self-organizing modules, advanced robots, and automation systems that enable flexible production processes.

- **Intra-logistics providers:** Develop and manage autonomous swarm fleets like mobile robots or drones that handle the internal movement of materials and finished products

# Critical Success Factors for Effective Cross-Industry Innovation

Cross-industry innovation can be a powerful approach to drive transformative solutions, unlock new value streams, and address complex challenges that no single industry or player could tackle alone. However, for cross-industry innovation to succeed, a set of crucial factors must be in place. The following key success factors are essential for maximizing the impact and sustainability of cross-industry innovation initiatives:

- **C-level engagement and strategic alignment:** Cross-industry innovation requires strong support from top management. C-level backing ensures that initiatives align with strategic goals, secure necessary resources, and gain visibility across organizations.

- **High level of trust and transparency:** Trust among partners is essential for open information sharing and effective collaboration. Transparent communication fosters confidence, allowing companies to share insights and resources without fear of competitive risk.

- **Clear shared vision and objectives:** Establishing a common purpose and mutually agreed-upon goals enables all parties to work cohesively. A shared vision clarifies the value each partner brings to the table and creates alignment toward long-term outcomes.

- **Robust governance and coordination mechanisms:** Effective cross-industry collaborations benefit from structured governance that sets roles, responsibilities, and decision-making processes. Strong coordination mechanisms keep efforts on track, reduce conflicts, and ensure efficient use of resources.

- **Adaptability and openness to learning:** Cross-industry innovation thrives when partners are open to adapting their practices and learning from one another. Flexibility to embrace new ideas and adapt strategies as the collaboration evolves is crucial for addressing complex, multi-dimensional challenges.