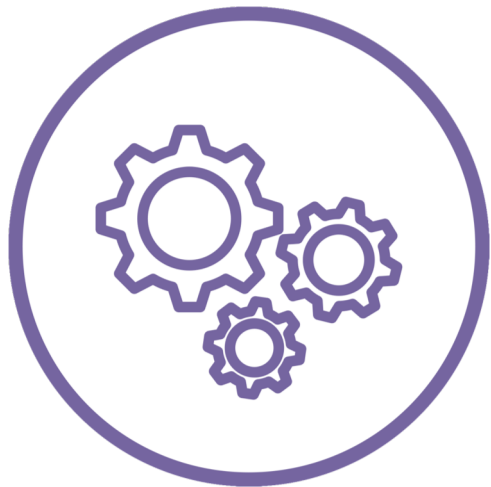
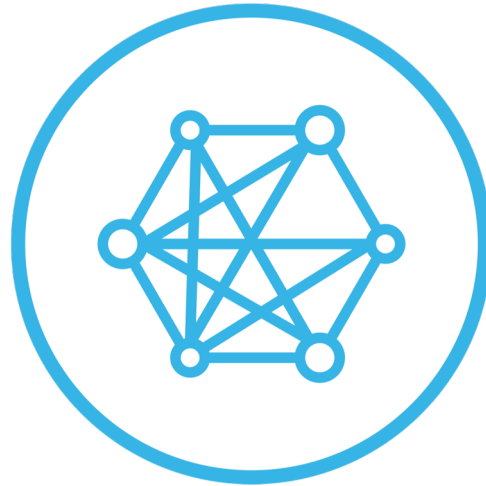


# Orphan Risks

Modern risks from radical new technologies, innovative ideas, and shifting norms need more than conventional risk management tools



Technological



Organizational



Social



## ORGANIZATIONS & SYSTEMS

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The risk domain of organizations and systems concerns the orphan risks associated with how businesses operate, and the broader social, economic, and political environment they operate within. It addresses often-overlooked risks associated with internal culture, and tensions between foundational values and organizational practices. It also addresses the sometimes-intangible risks associated with maintaining reputation and trust, and navigating a complex and shifting national and global governance and regulatory ecosystem.

This risk domain has six dimensions where lack of awareness and process can lead to orphan risks:

# Orphan Risks: Organizations & Systems



Bad Actors



Geopolitics



Governance & Regulation



Organizational Values & Culture

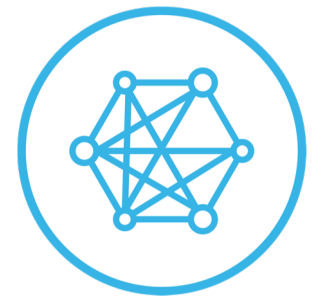


Reputation & Trust



Standards

# Orphan Risks: Questions related to Organizations & Systems



**If this question applies to you**



**review these orphan risks**

Are there other organizations within your industry operating unethically or outside of accepted standards that may lead to stakeholders questioning your own organization?



Bad Actors



Reputation & Trust



Perception



Co-opted Tech

How might current international relations affect your organization's ability to do business globally?



Geopolitics



Governance & Regulation



Product Lifecycle



Worldview

How might future global regulations affect your organization?



Geopolitics



Governance & Regulation



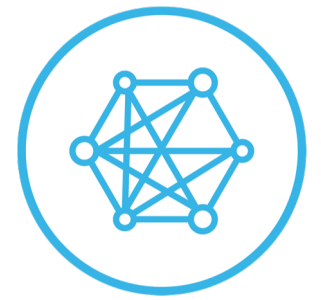
Product Lifecycle



Worldview



# Orphan Risks: Questions related to Organizations & Systems



**If this question applies to you**



**review these orphan risks**

How might emerging regulations, standards, or governance frameworks affect your business?



 Governance & Regulation  
 Standards

 Product Lifecycle  
 Health & Environment

How could evolving regulations and norms around the use of personal data affect your business?



 Governance & Regulation  
 Standards  
 Reputation & Trust

 Privacy  
 Social Trends  
 Loss of Agency

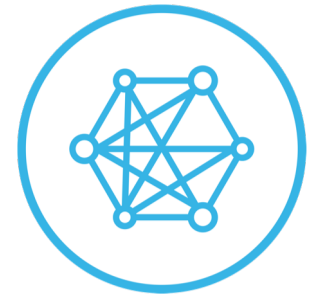
How could the evolving global politics around the use of data and AI potentially affect your business?



 Governance & Regulation  
 Standards  
 Geopolitics

 Privacy  
 Loss of Agency

# Orphan Risks: Questions related to Organizations & Systems



**If this question applies to you**



**review these orphan risks**

Are there disconnects between your organization's values and practices that may impact its future?



Organizational Values & Culture  
Reputation & Trust



Ethics

How is organizational culture likely to affect the success of your business?



Organizational Values & Culture  
Reputation & Trust



Ethics



Worldview

In what ways could your product or process create tensions around your organization's values?



Organizational Values & Culture  
Reputation & Trust

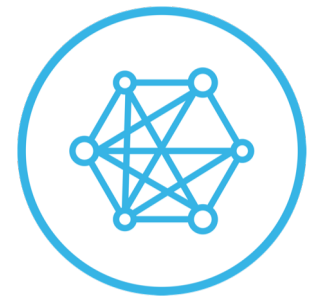


Ethics



Worldview

# Orphan Risks: Questions related to Organizations & Systems



**If this question applies to you**



**review these orphan risks**

In what ways could your organization's culture undermine long term growth and success?



Organizational Values & Culture  
Reputation & Trust



Perception  
Social Trends  
Worldview

What might some of the biggest threats be to your organization's reputation?



Reputation & Trust



Perception  
Social Trends  
Worldview

How could future product and process developments erode stakeholder trust?

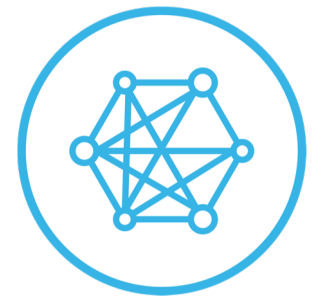


Reputation & Trust  
Organizational Values & Culture



Ethics  
Product Lifecycle

# Orphan Risks: Questions related to Organizations & Systems



**If this question applies to you**



**review these orphan risks**

Are there ways that your product is developed, marketed or used that could potentially undermine stakeholder trust, and therefore threaten your organization's reputation?



Reputation & Trust



Organizational Values & Culture



Standards



Ethics



Perception



Product Lifecycle

How might emerging standards around your process or product affect your business?



Standards



Product Lifecycle



Ethics



## SOCIAL & ETHICAL FACTORS

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The risk domain of social and ethical factors covers risks that are associated with how people think, feel, and act, and what they believe to be important, appropriate, and right. These risks are tied to personal and societal values and norms, and what is considered to be ethical behavior. They are also associated with how people see the world (their worldview), and their values and beliefs. And they are deeply affected by how people behave, including how perceptions, cognitive biases, and mental shortcuts (heuristics) affect the decisions they make and the actions they take.

This risk domain has six dimensions that lead to potential risks that are easy to overlook, but that can have profound consequences to sustainable growth if not identified and addressed early on:

# Orphan Risks: Social & Ethical Factors



Ethics



Perception



Privacy



Social Justice & Equity



Social Trends



Worldview



# Orphan Risks: Questions related to Social & Ethical Factors



**If this question applies to you**



**review these orphan risks**

What are the ethical questions associated with your product and its potential uses?



Ethics  
Perception



Co-opted Tech  
Bad Actors  
Reputation & Trust

How might ethical concerns affect your ability to grow and succeed as a company?



Ethics  
Perception  
Worldview



Reputation & Trust  
Organizational Values & Culture

How might perceptions by key stakeholders and influencers affect your organization?



Perception  
Social Trends  
Worldview



Reputation & Trust

# Orphan Risks: Questions related to Social & Ethical Factors



**If this question applies to you**



**review these orphan risks**

How might negative consumer attitudes toward products similar to yours extend to your own products?



- Perception
- Worldview
- Social Trends

- Bad Actors
- Reputation & Trust

How does your product have the potential to compromise the privacy of clients or stakeholders?



- Privacy
- Ethics
- Perception
- Social Justice & Equity

- Loss of Agency
- Reputation & Trust

How might the data you have privileged access to be used in ways that may compromise others?



- Privacy
- Ethics
- Perception
- Social Justice & Equity

- Loss of Agency
- Reputation & Trust

# Orphan Risks: Questions related to Social & Ethical Factors



**If this question applies to you**



**review these orphan risks**

In what ways could your collection and use of customer data threaten their privacy?



-  Privacy
-  Ethics
-  Perception
-  Social Justice & Equity

-  Loss of Agency
-  Reputation & Trust
-  Organizational Values & Culture

What are the potential social impacts of limited access to and affordability of your product?



-  Social Justice & Equity
-  Ethics

-  Loss of Agency
-  Reputation & Trust

Are there ways in which your product could lead to stakeholders--locally or globally--being put at a disadvantage?



-  Social Justice & Equity
-  Ethics
-  Perception

-  Product Lifecycle
-  Loss of Agency
-  Geopolitics
-  Reputation & Trust

# Orphan Risks: Questions related to Social & Ethical Factors



**If this question applies to you**



**review these orphan risks**

Are there ways your product or process could lead to employees or outside stakeholders being discriminated against?



-  Social Justice & Equity
-  Ethics
-  Perception

-  Product Lifecycle
-  Loss of Agency
-  Reputation & Trust
-  Organizational Values & Culture

How might your product lead to perceived or actual discrimination, and how might this affect your business?



-  Social Justice & Equity
-  Ethics
-  Perception

-  Reputation & Trust
-  Bad Actors
-  Co-opted Tech

How might changing trends in the way people make purchases affect your business?



-  Social Trends
-  Ethics
-  Worldview

-  Product Lifecycle

# Orphan Risks: Questions related to Social & Ethical Factors



**If this question applies to you**



**review these orphan risks**

How might evolving social norms, behaviors, and attitudes impact your business?



-  Social Trends
-  Perception
-  Worldview

-  Reputation & Trust
-  Organizational Values & Culture
-  Health & Environment

How could the political, religious, and social views of potential customers as well as your larger community affect future business?



-  Worldview
-  Perception
-  Social Trends

-  Reputation & Trust
-  Geopolitics

How might the cultural practices, beliefs and lifestyles of key stakeholders affect your business?



-  Worldview
-  Perception
-  Social Trends

-  Reputation & Trust
-  Organizational Values & Culture



# UNINTENDED CONSEQUENCES OF EMERGING TECHNOLOGY

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The risk domain of unintended consequences of emerging technologies specifically addresses the often-unanticipated impacts of new technological capabilities. These are risks that often fall within conventional risks domains like health and the environment, but are sufficiently novel that they elude established risk assessment and management approaches.

This risk domain has six dimensions where unintended consequences can lead to orphan risks if they are not considered:



# Orphan Risks: Unintended Consequences of Emerging Technologies



-  Black Swan Events
-  Co-opted Tech
-  Health & Environment
-  Intergenerational Impacts
-  Loss of Agency
-  Product Lifecycle

# Orphan Risks: Questions related to Unintended Consequences of Emerging Technologies



**If this question applies to you**



**review these orphan risks**

What are some of the low probability but high impact future risks associated with your product?



Black Swan Events



Health & Environment



Reputation & Trust

Is there a danger of perceived risks associated with your product affecting your business?



Co-opted Tech



Perception



Bad Actors



Reputation & Trust

How could applications of your technology outside of its stated intended use affect your organization?



Co-opted Tech



Black Swan Events



Bad Actors



Reputation & Trust



Ethics



Perception

# Orphan Risks: Questions related to Unintended Consequences of Emerging Technologies



**If this question applies to you**



**review these orphan risks**

If someone else uses your product or process in ways that you and others consider to be unethical, how will this affect your organization?



 Co-opted Tech  
 Black Swan Events

 Organizational Values & Culture  
 Reputation & Trust  
 Perception  
 Ethics

If your organization changes leadership or is acquired by an outside company, could your technology be used in ways that are harmful or dangerous, or otherwise outside of your original intention?



 Co-opted Tech  
 Loss of Agency

 Organizational Values & Culture  
 Reputation & Trust

What are the possible unintended health consequences--short and long term--of the services you provide?



 Health & Environment  
 Intergenerational Impacts  
 Black Swan Events

 Ethics

# Orphan Risks: Questions related to Unintended Consequences of Emerging Technologies



**If this question applies to you**



**review these orphan risks**

Does your product have the potential to release persistent pollutants into the environment?



- Health & Environment
- Intergenerational Impacts
- Black Swan Events
- Product Lifecycle

- Standards
- Governance & Regulation
- Social Justice & Equity
- Ethics

What are some of the ways in which your product could potentially impact mental or emotional health?



- Health & Environment
- Loss of Agency

- Ethics

Are there potential environmental risks associated with the technology, the product, or the waste produced from the process?



- Health & Environment
- Product Lifecycle

- Standards
- Governance & Regulation
- Social Justice & Equity
- Ethics

# Orphan Risks: Questions related to Unintended Consequences of Emerging Technologies



**If this question applies to you**



**review these orphan risks**

Could your product lead to future generations being adversely impacted?



Health & Environment



Intergenerational Impacts



Black Swan Events



Social Justice & Equity



Ethics



Reputation & Trust

How might your technology reduce the ability of customers or community members to have control over their own lives?



Loss of Agency



Co-opted Tech



Ethics



Privacy



Social Justice & Equity

In what ways might your product reduce the ability of users or other stakeholders to make informed decisions?



Loss of Agency



Co-opted Tech



Ethics



Privacy



Social Justice & Equity



Organizational Values & Culture

# Orphan Risks: Questions related to Unintended Consequences of Emerging Technologies



**If this question applies to you**



**review these orphan risks**

Does your product or process risk having built-in biases that potentially lead to some people being discriminated against?



Loss of Agency



Product Lifecycle



Co-opted Tech



Social Justice & Equity



Ethics



Perception



Organizational Values & Culture

How might your process lead to adverse health and environmental impacts across the product life cycle, from production through to consumption and disposal?



Product Lifecycle



Health & Environment



Standards



Governance & Regulation



Social Justice & Equity



Ethics



# Review and Record your Orphan Risks

