



Risk Innovation Nexus

Culminating Report
October 2020

Director's Note

Dr. Andrew Maynard

associate dean for curricula and student success, ASU College of Global Futures



The seeds of the ASU Risk Innovation Nexus were planted several years ago, while I was working with entrepreneurial students at the University of Michigan. Faced with a bewilderingly complex landscape around emerging and hard to grapple with risks -- many of them social and political in nature -- it was clear that entrepreneurially minded creators of the future needed a completely new risk toolkit if they were to not just succeed, but succeed in a way that that was a win-win for them and society more broadly. However, it wasn't until 2016 that the ASU Idea Enterprise initiative provided the opportunity to transform these seeds into a flourishing enterprise.

With the encouragement of the Idea Enterprise and the support of Entrepreneurship + Innovation, we launched the Risk Innovation Accelerator in 2017 with the aim of providing time and resource-constrained entrepreneurs and others with a unique toolkit for navigating what we came to call "orphan risks" -- those hard to quantify and easy to ignore risks that nevertheless have a habit of coming back to bite.

In 2019 we changed our name to the Risk Innovation Nexus, reflecting the evolving nature of our approaches that empower anyone working at the nexus of entrepreneurship and social value creation in a rapidly changing world. And with it, we began to see those initial seeds transformed into a powerful array of tools and resources that uniquely support entrepreneurial success. Looking forward, I'm excited to see how these will be used to build a future we can all aspire to.


Ms. Ji Mi Choi

associate vice president and founding
executive director, J. Orin Edson
Entrepreneurship + Innovation Institute (E+I)



The Risk Innovation Accelerator, later, Nexus, was an an opportunity to work with what could have been an intellectual theory and idea, but through this collaboration, and the hard work and talent of many, turned into a tangible, valuable, set of frameworks, tools, and mitigation supports providing direct benefit to entrepreneurs and others.

This is the heart of what E+I does - support turning ideas, theories and problems into new solutions: products, services, new ways of doing things - in collaboration with our colleagues, our communities, and our teams. There is nothing more exciting than seeing an idea turn into a valuable, beneficial, and actual thing in the world with lasting impact.

The background of the slide features a complex, light-colored geometric pattern. It consists of various hexagons, some of which are solid, some are outlines, and some contain smaller shapes like plus signs or dots. These hexagons are arranged in a way that creates a sense of depth and movement, with some appearing to be part of a larger, more intricate structure. The overall color palette is muted, with shades of grey, beige, and light blue.

Through our risk innovation framework, the **Risk Innovation Nexus** is opening up ways for organizations to succeed because of how they approach responsible and ethical innovation, rather than in spite of it.

Explore more at Riskinnovation.org



Why Risk Innovation?

Entrepreneurs -- whether they are setting up a new business, working within an existing organization, or simply exploring new ways to create value in the work they do and the lives they live -- are no strangers to risk. Taking chances and making tough decisions in the face of uncertainty come with the territory. And because of this, successful entrepreneurs are deeply risk-savvy.

And yet, in the increasingly complex world we live in, risk-savvy all too easily becomes a risk-liability as new and unexpected threats to value emerge.

Some of these threats have a familiar feel to them -- risks to health, wealth and environment for instance. But many do not, including a growing array of social, personal and ethical factors that often confound conventional risk mitigation strategies.

In today's fast-paced world of technological advances, global interconnectivity, and shifting social expectations, effective approaches to risk demand new ways of thinking and acting. And they require new tools that enable entrepreneurs and others to plan a way forward -- often with little time and money.

In other words, if we are to succeed in the face of the increasingly convoluted risk landscape that lies before us, we need to think innovatively in how we map out and navigate this landscape.

This is at the heart of risk innovation. It's an approach to risk that brings an entrepreneurial mindset to navigating a deeply complex risk landscape in order to protect and create value. And it's foundational to the tools, resources and expertise represented within the [Risk Innovation Nexus](#).

The Risk Innovation Approach

In order to successfully navigate a risk landscape that is increasingly being influenced by radical new technologies, innovative ideas, and shifting social norms, organizations and individuals — both entrepreneurs and intrapreneurs — need to be equally innovative in how they think about and act on risk. By focusing on areas of value to enterprises, investors, customers, and communities, our approach to risk enables organizations to identify and navigate easily overlooked “orphan risks.”

What is important?

To whom is that important?

What could threaten value?

How to respond with agility?

VALUE

+

STAKEHOLDERS

+

ORPHAN RISKS

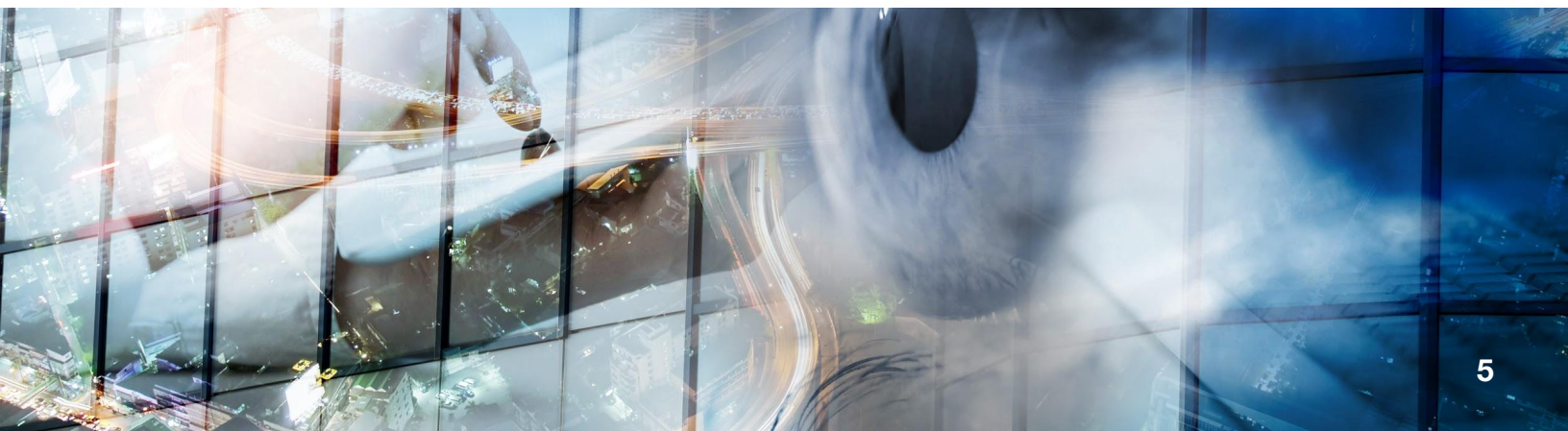
+

TOOLS

=

RISK INNOVATION MINDSET

To learn more about the risk innovation approach, and to find the tools that can help you develop your own risk innovation mindset, visit our website, riskinnovation.org



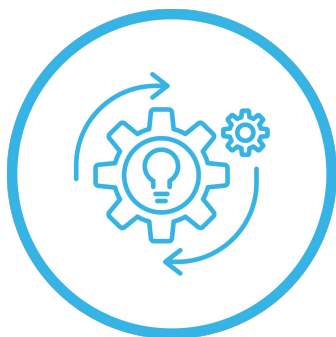
Foundational Pillars

The Risk Innovation Nexus is built on **three foundational pillars**, which together support and enable adaptability and agility in the face of new challenges.



RESOURCES & TOOLS

Our extensive toolkit provides practical resources for applying risk innovation approaches in a variety of use cases. Our tools and resources are designed to be used by individuals and enterprises throughout the innovation pipeline.



EDUCATION & TRAINING

We have developed and offered unique education and training resources that enable individuals and organizations to think differently about risk, while integrating social and ethical responsibility into innovation and problem solving.



INSIGHTS & ANALYSIS

We have published articles, case studies, blogs, podcasts, and more, that provide our stakeholders with insights which are designed to help them navigate a constantly changing risk landscape.



RESOURCES & TOOLS

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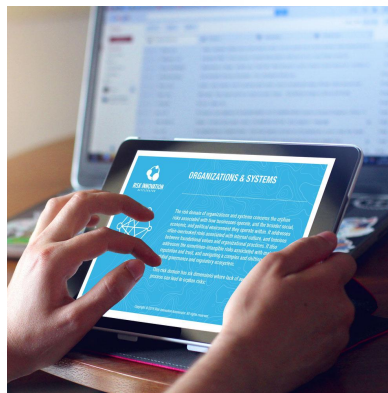
- Our keystone tool, the **Risk Innovation Planner**, is a simple and effective way to identify and begin planning for orphan risks. When used over time, it is instrumental in developing a risk innovation strategy
- Our **Risk Innovation Toolkit** contains resources and activities that help develop a risk innovation mindset: definition cards, scenario cards, stakeholder value, question cards, landscape mapping, and more
- All of our tools are available on our website, riskinnovation.org on the **'Activities & Guides'** page



[Risk Innovation Planner](#)



[Risk Innovation Tools](#)



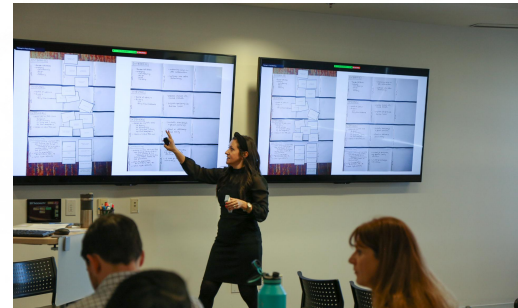
[Risk Definition Cards](#)



EDUCATION & TRAINING

We have developed and offered unique education and training resources that enable individuals and organizations to think differently about risk, while integrating social and ethical responsibility into innovation and problem solving.

- Hosted 15 **workshops** both internal and external to ASU, including: Venture Devils; Training and Development Network; StartupAZ; Flinn Foundation; WE Empower United Nations SDG Challenge
- Worked directly with ASU **students** through Founder's Lab; Luminosity Lab; MS Innovation and Venture Development; and more
- Continue to **educate** entrepreneurs and the entrepreneurially-minded via:
 - [Canvas Module](#), an add-on that can be imported into any existing ASU course
 - Our website: riskinnovation.org/activity-guides



In depth workshops, J. Orin Edson
Entrepreneurship + Innovation
Institute - February 2020



INSIGHTS & ANALYSIS

We have published articles, case studies, blogs, podcasts, and more, that provide our stakeholders with new and updated insights which are designed to help them navigate a constantly changing risk landscape.



Case Study: [Flo](#)



Blog: [Facial Recognition](#)



Blog: [Risk Innovation in Practice](#)

Our **case studies** were developed to increase entrepreneurs and other users' understanding of how risk innovation applies to real-world challenges.

Case studies include:

- [Flo](#): Women's Health App that Tracks Personal Health Information
- [Predictim](#): AI to Determine the Risk-Level of Potential Babysitters
- [TOMS](#): A Step in the Wrong Direction

All of our case studies can be downloaded [here](#)

Our **blog**, Rethinking Risk, was developed as an informal platform for exploring risk innovation and the emerging challenges that entrepreneurs, businesses and others are facing.

Recent blog posts include:

- [Risk Innovation in a Time of Coronavirus](#)
- [A Social Network's Social Risks](#)
- [Facial Recognition Technologies](#) and Law Enforcement from a Risk Innovation Perspective

All of our blog posts can be viewed [here](#)



INSIGHTS & ANALYSIS

We have published articles, case studies, blogs, podcasts, and more, that provide our stakeholders with new and updated insights which are designed to help them navigate a constantly changing risk landscape.

Risk Innovation Nexus - **recent publications:**

The Many Ways Elon Musk's Neuralink Could Go Wrong

Andrew Maynard, OneZero (November 2019) [\[access the article here\]](#)

The Ethical and Responsible Development and Application of Advanced Brain Machine Interfaces

Andrew Maynard and Marissa Scragg, Journal of Medical Internet Research (October 2019) [\[access the article here\]](#)

Innovating responsibly in a culture of entrepreneurship

Andrew Maynard and Elizabeth Garbee, Edge of Innovation (August 2019) [\[access the article here\]](#)

The Forgotten Risk of Fitness Trackers

Andrew Maynard, OneZero (March 2019) [\[access the article here\]](#)

It's time for tech startups and their funders to take "orphan risks" seriously

Andrew Maynard, Edge of Innovation (December 2018) [\[access the article here\]](#)

Sci-fi movies are the secret weapon that could help Silicon Valley grow up

Andrew Maynard, World Economic Forum (November 2018) [\[access the article here\]](#)

Risk Innovation - **foundational publications:**

How Terrified Should We Be of This Year's World Economic Forum Top 10 Emerging Technologies?

Andrew Maynard, Slate (June 2016) [\[access the article here\]](#)

Thinking innovatively about the risks of tech innovation

Andrew Maynard, The Conversation (January 2016) [\[access the article here\]](#)

Why we need Risk Innovation

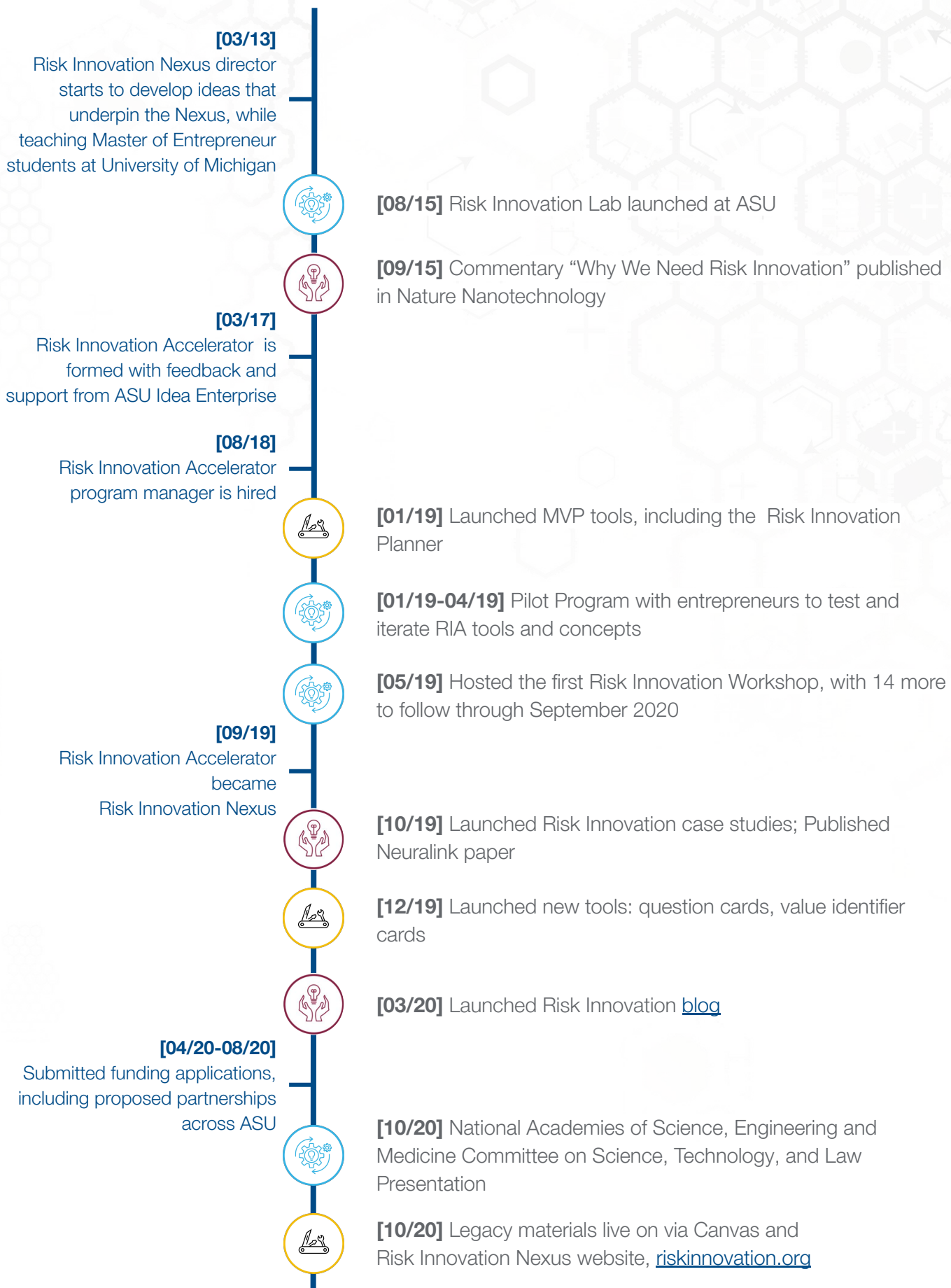
Andrew Maynard, Nature Nanotechnology (September 2015) [\[access the article here\]](#)

Responsible development of new technologies critical in complex, connected world

Andrew Maynard, World Economic Forum (March 2015) [\[access the article here\]](#)



Risk Innovation Milestones



**It's time to think
differently about risk.**



Closing Thoughts

Marissa Scragg Program Manager



It has been an adventure to navigate the ASU Risk Innovation Nexus, and an honor to leave a legacy of tools and resources for ASU's student and entrepreneurship communities, and beyond. Working at the nexus of collaboration between the School for the Future of Innovation in Society's Risk Innovation Lab and the J. Orin Edson Entrepreneurship + Innovation Institute pushed me to dive into the ideas behind risk innovation and grow them into actionable, useful outputs for the entrepreneurship community.

Our foundational tool, the **Risk Innovation Planner**, remains an accessible and practical resource that can be used consistently, over time to identify and navigate orphan risks. The **multitude of tools and resources** that we have created to support and build upon the work of the Risk Innovation Planner is a true accomplishment. I am excited to see how future entrepreneurs and innovators are drawn to the risk innovation approach and use these methodologies to advance their own work.

Jessica Givens Stakeholder Engagement Coordinator



*"A ship in the harbor is safe,
but that is not what ships are built for." -John Shedd*

The global need for entrepreneurs solving our most pressing challenges has never been greater. And while entrepreneurs are already well acquainted with the path of most resistance, we hope you and your team can use the tools and approaches developed by the Risk Innovation Nexus to – not just survive – but thrive and add value in new and exciting ways. We are grateful for the opportunity to be a part of your journey and wish you happy navigating.

With special thanks to our Advisors and Graduate Student Associates:

ADVISORS



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