Member Success Case Study | Written By: Audrey Woods

KomplyAi

Few topics are more exciting in the realm of business technology than artificial intelligence (AI). Offering the ability to automate tasks, analyze vast datasets, help companies make informed decisions, offer personalized customer recommendations, and more, AI could transform every industry, from healthcare to finance.

However, as the potential of this technology grows, so do the legal frameworks around it. All over the world, laws are emerging to protect consumers and safeguard against AI-related risks, including bias, breaches in data privacy, copyright infringement, and exacerbated income inequality. Due to the fast-moving nature of this field, the landscape of new laws and standards—not to mention the interpretation of existing ones—is dynamic, making it difficult for businesses to proceed with confidence. How can companies looking to implement AI solutions be sure they're up to date on the latest rules? How can they design their emerging AI programs in a way that takes potential future restrictions into account?

Australian-based CSAIL Startup Connect Plus member KomplyAi offers one answer in their AI governance, risk assessment, and compliance platform. Based on decades of legal experience and data gathered on AI-related laws and standards, KomplyAi aims to support small businesses, large organizations, and governments as they bring about a safe and trustworthy AI-powered world.

GETTING THEIR START

Even though her startup is technically only a year old, KomplyAi founder Kristen Migliorini has spent more than twenty years in the law, occupying a variety of roles including IP litigator for a top tier global firm, legal counsel at the University of Sydney specializing in deep technologies and compliance, legal counsel for a top bank, and as head of her own law firm with a focus on tech. She says she's "worked with and been surrounded by amazing innovators my entire legal career," which makes her familiar with both startups and tech companies.

Despite this extensive experience, Migliorini decided to improve her skills by studying at MIT's Sloan School of Management in 2021. She wanted a "more nuanced and technical understanding of AI [and] a deep dive into an area that was constantly evolving." During the course of her work at MIT, one of her major projects was related to implementing AI technologies in a practical business setting. Recognizing the shortage of necessary skills in that area, Migliorini set about to connect businesses with uncommon but essential technical knowledge in AI risk assessment. "When I first started investigating this," she explains, "I realized that there was such a small number of people in the world doing risk evaluation work of AI systems," an opening she felt was ripe for innovation given the laws coming from the European Union. Thus, her founder journey began with the question: how can we use technology to undertake the risk evaluations of AI systems that will be required under impending laws at scale and in a way that is accessible to all?

In pursuing this goal, KomplyAi was born.

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KOMPLYAI: A TECHNICAL APPROACH TO AI RISK ASSESSMENT

To create a foundation for their platform, over the past few years KomplyAi has curated a large repository of data on the laws that intersect with AI technologies from around the globe, separated by sector and AI activity type. This includes an array of industries, such as higher education, banking, health, critical infrastructure, and employment. Migliorini explains that gathering this knowledge highlighted to her how enterprise was grappling to keep up with the volume and complexity of laws intersecting with AI technologies. She says, "there is a level of inertia or even paralysis occurring in organizations when things become too hard and are not well known. The investment of resources isn't readily justifiable where the level of effort in risk management potentially outweighs the benefits."

Building out her original framework, Migliorini says that she and her team conceptualized a "bottom up" approach which was designed to help companies and workers at all levels of AI compliance education. For example, KomplyAi's system prompts the user with questions in key areas relating to AI, such as transparency, explainability, and data privacy, guiding clients through what Migliorini calls the "four stages of the AI life cycle up until the riskiest stage, which is when the technology is placed and deployed in its operating environment." The initial system they built—with the insightful help of MIT alumnus Dr. James Koppel— was a mobile-friendly web application packed with AI-related training and guidance which aimed to tackle basic misconceptions about AI compliance and bring employees up to a level of understanding where they're likely to catch key risks before they manifested. Overall, Migliorini likes to describe this original product as a "micro tool in AI support," which helps by triaging risk assessment before a product reaches the critical launch point.

KomplyAi has gone on to build a prototype SaaS platform for enterprise customers with the APAC Prototyping team at AWS. The first prototype they developed together is "essentially a governance, risk, and compliance management platform," which is serverless, the UI drawable by way of API, and features an intelligent workflow engine that navigates customers through a curated evaluation of their AI systems. The platform can be used by organizations that are either developing, procuring, or deploying AI technologies in any sector to centralize organizational visibility and monitor their AI technologies. By drawing in stakeholders (data scientists, privacy, cyber, legal, board members, etc.) both across and outside an organization, KomplyAi aims to involve key players at all relevant stages of AI development, assigning organizational risk ratings, helping users navigate existing projects, and prompting relevant stakeholders to undertake further reviews.

With significant impending global laws and policymakers scrambling to work out how to approach some of these novel risk areas, it's more important than ever for companies to think critically about how the technology they're developing or using might have negative repercussions, both legally and societally.

For Migliorini, there are personal reasons behind her founding KomplyAi and her passion in this area, namely her two young daughters. "I have a 5- and 8-year-old and am concerned about the world that they are growing up in, the technologies that they will interact with, and what that actually means for them." To Migliorini, there are important lessons to be learned from the impact of large social media platforms and other transformative technologies. She says, "as a parent and technologist, I firmly believe in the power of innovation and that it will solve some of our greatest societal needs, but there needs to be safety guardrails in place. Technologists play such an important role in getting this right, but that responsibility doesn't solely rest on their shoulders. We all play a part."

CSAIL ALLIANCES: SOLIDIFYING AN IDEA

One of the benefits of having studied at MIT was that Migliorini was introduced to the CSAIL Alliances Startup Program early on, while she was still building out the foundations of her company's technology. She describes how connecting with Alliances proved critical in conceptualizing the product and thinking through key aspects of the fundamental research underpinning her technologies. Migliorini describes her CSAIL Alliances Client Relations Coordinator Christiana Kalfas as "incredible" and likens her to "a research concierge," always eager to share curated papers and recent MIT projects related to KomplyAi. "I met some of the most amazing researchers at MIT through Alliances and we'd have these really incredible discussions about their research and what they were doing," which helped her determine whose projects were analogous to the commercial work she was undertaking. Migliorini highlights how she engaged with Professor D. Fox Harrell, whose research into risk and anti-risk correlators relating to AI systems directly helped her build out the initial KomplyAi product. "The first time I met Professor Harrell, I was truly taken aback by his approach, knowledge, and the depth of his work as the founding director of MIT's Centre for Advanced Virtuality".

Migliorini elaborates: "**the connection to MIT and to researchers through the startup program was really quite pivotal because it either developed or firmed up my research on some really complex and cutting-edge issues**." In her mind, combining the skillsets of academic researchers, industry professionals, and compliance backgrounds such as her own to create a commercial product is crucial because "we won't solve these novel challenges with a singular mindset. We need the lawyers, academics, ethicists, large technology companies, and ultimately, the 'doers,' coming together."

LOOKING FORWARD

Now that KomplyAi has undertaken the fundamental research and tested, piloted, and prototyped their technologies with support from AWS, they are ready to start scaling up and working with global enterprise customers who want to optimize their AI investment. Recognizing the importance of research institutions as the frontier of AI— both in training the next generation of technologists and investigating the key academic questions in the field— Migliorini is currently deploying KomplyAi's platform into one of Australia's top universities. On the business side, Migliorini explains how more and more companies are saying that they "want to build their AI systems mindful of impending laws and, given the long gestation periods of these model builds, they don't want to heavily invest now and be exposed to costly rebuilds moving forward when they are prevented from certifying the technology to market," a goal KomplyAi is happy to facilitate.

When it comes to CSAIL Alliances, Migliorini plans to stay heavily engaged and take full advantage of what the Startup Connect Plus program offers. She hopes to continue working with MIT's top-tier researchers to further develop the KomplyAi platform and supporting technologies, and to seek out potential industry collaborators through CSAIL Alliances events. She was recently selected to present at MIT on the topic of large language models to top U.S. banks innovating in this area. Migliorini says that, as someone from a non-technical and legal background, "I offer a very different perspective in these rooms, which I hope helps."

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LOOKING FORWARD *(continued)*

Even though she describes founding her startup as "professionally one of the hardest things I've ever done," Migliorini feels a deep responsibility to be a part of this work. Acknowledging the enormous potential ramifications of AI technology, she hopes KomplyAi can enable AI innovation while mitigating some of its risks. Migliorini concludes, "as a founder you never stop learning, adapting, and seeking better and faster ways to do things... **MIT is absolutely an enabler to this pipeline of learning and success**."

Hear about founder Kristen Migliorini's journey on the AWS Innovation Ambassadors podcast or visit KomplyAi's website to learn more.

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