

Overcoming Obstacles In Tech Innovation

Babst Calland Shareholder Justine Kasznica on guiding our region's tech evolution and growth amid legal and regulatory challenges

By Daniel Bates, Contributing Writer

Attorney Justine Kasznica would be the first to admit that she moved to Pittsburgh to take a chance on an apparent regional business renaissance driven by a promising technology sector. Over time, the region hasn't disappointed.

"It's an incredibly exciting time to be in this region and to be an attorney working with emerging technologies," said Kasznica, who quickly would find her way into the center of Pittsburgh's technology universe and help drive significant industry growth as part of a flourishing entrepreneurial ecosystem here.

"We are absolutely capturing a moment in history in this tri-state region," she said. "To be able to experience the outputs of the efforts of the technologists across the region and to be part of the investor and adviser teams who are helping them grow is as rewarding as it is exciting."

Today, Kasznica serves as a shareholder of Pittsburgh law firm Babst Calland, leading the firm's emerging technologies group and serving on the front lines of a local industry sector that has gained global recognition while also facing its share of business and legal challenges. Babst Calland is one of the Pittsburgh region's largest law firms.

Kasznica recently shared her insights on Pittsburgh's burgeoning tech sector, from opportunities to greatest challenges, with the Pittsburgh Business Times as part of the law firm's ongoing "Business Insights" interview series. The series is produced in partnership with the Pittsburgh Business Times.

Universities, R&D, and entrepreneurial support

So what has made the region's tech sector – sometimes referred to as Pittsburgh's innovation economy – so strong and thriving, even compared to the likes of California's Silicon Valley?

"Although several years old at this point," Kasznica said. "the 2017 Brookings Report identified R&D – which was two times the national average – as a key driver of Pittsburgh's innovation economy. What that means is our universities are an incredible strength for the region, resulting in the tremendous tech opportunities around areas including autonomous mobility, robotics and AI, material science, advanced manufacturing and life sciences. I think these have been shown to be the region's key strengths."

Field robotics and the emergence of autonomous mobility research and development in Pittsburgh, she added, was one of the reasons she moved to Pittsburgh as an attorney. Among her goals: to help provide a legal framework for autonomous systems across industry sectors, including robots, drones, and commercial space – "basically air, land, sea and space robots," Kasznica said.

What she found in the region, in the meantime, was a diversity of entrepreneurial support systems in place to help bridge the gap between academic research and economic development in Pittsburgh.

"I would say there has been a helpful increase in consolidation of efforts and resources to translate R&D into commercial products and services," Kasznica said. "You're seeing that with a lot of the universities, [technology] incubators and accelerators in the region who are working alongside workforce development organizations in a more coordinated fashion to bolster the successful commercialization of new technologies."

The other significant driver, she said, has been access to capital and other resources, which continues to improve as the region gains greater attention worldwide for its work in autonomous systems, robotics, life sciences and other areas of technology commercialization.

"We obviously could still do better at that, but in the last year, we've seen the announcements of new venture and angel investment funds in the region. This is good news," Kasznica said. "In addition, an opportunity exists for large enterprises to deploy strategic investment capital to support the region's emerging technology companies."

Where the opportunities are

Kasznica said the emerging technologies group at Babst Calland



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is seeing some of the greatest opportunities for tech-based growth in autonomous vehicles and autonomous systems. That said, she also identified the so-called Internet of Things, or IoT, as another area of economic promise for the region.

IoT is "very strong," she said. "That is essentially the networking of physical hardware and software."

Then there's energy innovation.

"We're seeing a tremendous opportunity for energy innovation in this region, including a variety of renewable energy technologies, electrification and smartgrid technologies, as well as technologies aimed at digitizing traditional energy assets, and optimizing existing systems and processes," Kasznica said.

And with the many technology opportunities for the region comes the inevitable threat to the region's cybersecurity – which in itself presents an opportunity for solutions-oriented technology development.

"A key, underlying theme that transcends all of these are data privacy and cybersecurity," said Kasznica. "Whenever we talk about networked systems of any kind, we have to worry about cyber threats. The security and preservation of data is at the core of our emerging technologies legal practice."

What to watch out for

Having worked with many local emerging technology companies over the years, Kasznica identifies several common pitfalls which ought to be addressed and avoided.

"Because our region is so strong in R&D, there's a tendency for companies to build cool tech for the sake of building really cool tech," she says. The question is whether there is a willing market for such cool tech. In addition to proving technology fundamentals, companies need to be engaging in customer discovery to really understand the market and build an appropriate business model around their tech (or in some cases adapt their tech or pivot their strategy to solve an actual market problem).

"These are brilliant inventors who have just birthed this most incredible technology," she continued. "To connect that to an actual paying customer is where the real money is made...having a well-rounded understanding of those pieces and collaborating with experts to address those issues early on in their development is probably one of the greatest challenges and opportunities for our tech sector right now."

Another fundamental issue is a recognition that there is no one-size-fits-all approach to successful technology business models. "I want to make sure our clients, particularly those working in robotics, IoT and hardware-dependent technologies, recognize that what might apply to largely software-driven [software-as-a-service] platforms in terms of scaling and ROI is not always the right approach for them. There's a real opportunity for different models of growth for companies in this region, including organic growth by growing a satisfied customer base, and focusing on leveraging non-dilutive R&D investment and strategic investment in addition to venture capital investment.

"I would say that we need to recognize what is unique and the strength of our region," she added, "and encourage appropriate business methodologies customized for each client."

Regulatory hurdles to innovation

As lawyers, Kasznica and her Babst Calland colleagues do spend considerable time helping their clients navigate state and federal regulations that can have a dampened effect on innovation

development and commercialization.

"Across all of these tech sectors, regulatory barriers are a key issue, and I would say they fall into three categories," she said. "One is regulatory overload, or regulatory uncertainty. A classic example of this is data privacy. We have a patchwork quilt of laws and regulations that are both federal and state right now. To help advise a company to be able to be compliant with a myriad of laws can be complicated."

Another barrier, for both young and mature companies alike, she said, are laws that do not anticipate technological change and can end up becoming barriers to commercialization. She cited, for example, aviation regulations and motor vehicle safety standards, and how those regulations, which were thoughtfully designed to ensure safe skies and roads for human operators and passengers, are no longer adequate (or even applicable) when applied to unmanned aircraft or autonomous vehicles.

"As a result, a lot of what we end up doing for our emerging technology clients is compliance by seeking exemptions from existing laws," Kasznica explained.

Kasznica also said regulations are by their nature often "reactive," and unable to anticipate fast-evolving technologies. As a result, it is prudent for lawmakers to seek industry input when designing laws addressing new technologies to ensure that the laws are flexible enough to allow for invariable technological change.

Advice to startups and mature companies

Whether a technology company is large or small, there are barriers to success across four segments – quality, resources, agility and culture. For young companies, the greatest challenge is a lack of resources (and consequently an inability to deliver highest quality products on time every time). But these same companies often are agile and have a dynamic culture that can attract and retain next generation critical talent. For large companies, resources are not often an issue, but culture and agility are often compromised (which can lead to a dispassionate workforce over time, resulting in high levels of attrition and impaired quality). At Babst Calland, our goal is to work with large and small technology companies alike, and recognize and play to their strengths while working to solve their weaknesses. What this translates to is a commitment to offer to young technology companies a business partnership of sorts – quality legal services and legal and regulatory solutions that fit within their budget, while working alongside them to pursue appropriate capitalization and fundraising strategies. For established companies, this means serving as a trusted advisor, to find legal and regulatory solutions that enable them to comply with the law and deliver the highest quality products and services, and to provide market insights that enable them to anticipate and be able to adapt quickly to respond to market and technological trends and changes whether through acquisition, investment or in-house development of new technology.

That advisory partnership approach, Kasznica said, is what she most enjoys about working with large and small companies within the tech sector.

"With the technology-driven evolution that this region is experiencing, I see an opportunity for lawyers to embrace and play that advisory role, by working as trusted partners to our clients, understanding their business goals, and helping them not just by delivering the quality legal product that they need, but also helping to contextualize that work within the greater business narrative."

And the result of such partnership with tech companies? "I really believe that this region is poised for even a stronger presence in the technology sector. And as attorneys were once involved as critical partners and enablers of the industrial revolution, we have an opportunity to be critical partners and enablers of the current technological revolution, sitting at the table with founders, leaders and investors, not simply as legal service providers, but as business advisors, offering strategic counsel on everything from formation to commercialization to investment – all in service of protecting our clients' business interests and assets."

To view the full video interview with Justine Kasznica and more articles on current business issues and trends, visit www.pittsburghbusinesstimes.com/babstcalland.