

# BOSTON BUSINESS JOURNAL

## BOSTINNO'S 2021 INNO ON FIRE

Meet the 50 startups and individuals setting Boston's innovation ecosystem ablaze.

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If 2020 was a strange year for Boston's startups, companies and nonprofits, 2021 was its equally weird sequel.

But the continuing pandemic, global supply-chain shortages, economic turmoil and a remote work revolution haven't stopped them from innovating.

Today, we're honoring the companies that were on fire in 2021, raising money, growing their firms, bringing in new customers, launching new products and boosting Boston's ecosystem.

Soon, we'll announce the Blazer winners, one from each category, chosen by our panel of judges.

Without further ado, here are your 2021 Inno on Fire honorees:

### Health and MedTech

Boston's medtech scene is never "not" on fire, but here's who was hottest in 2021.

**1UpHealth:** Founded in 2017 in Boston and seeded by MassChallenge, 1UpHealth has had a roaring 2021. The company helps health systems and insurers, including some of the biggest like Aetna and Cigna, convert their data into the federal government's mandated programming standard, FHIR (coincidentally pronounced "fire"), and become interoperable with other providers. This year it raised \$25 million in Series B funding, grew from 32 to 102 employees, and increased its sales by 300% over 2020. 1UpHealth is

also getting ready to grow its market by entering the pharmaceutical industry.

**4G Clinical:** 4G Clinical is working to use natural-language processing to accelerate clinical trials, and it was a year of acceleration for the company, too. Its cloud-based solution for randomization and trial supply management, which more than 100 biotech and pharma companies around the world use, netted a \$230 million growth equity investment from Goldman Sachs Asset Management in June. 4G has grown by 100% in the last year. And it made its way onto the prestigious Inc. 5000 list, coming in at 111th. Part of its success has been pandemic-inspired innovation: the platform helped trial participants take part from home.

**Activ Surgical:** Activ Surgical is a digital surgery company that continued its momentum in 2021. The Boston firm's imaging module received clearance from the FDA in April, and 13 major healthcare systems have committed to piloting it. The company closed a \$45 million Series B round in September (for an all-time total of \$77 million), added 16 employees this year and launched five new partnerships with Sony, Microsoft, Qualcomm, Nvidia and Innominds to boost its product offerings.

**ConnectRN:** With new CEO Ted Jeanloz in place, ConnectRN had a strong 2021. The company, which has a platform that connects nurses and aides with opportunities and a community, raised \$13 million, grew its employee headcount by roughly 50% and nearly doubled the number of markets it's in. The Waltham startup has seen more than 5,000% revenue growth since 2017 as over 2 million hours have been worked by nurses and aides using its platform to find schedules that work for them.

**Elucid:** MedTech startup Elucid has had a hot 2021. The company's AI solu-

tion which aids the treatment of cardiovascular solutions powered it to an oversubscribed \$8 million Series A and an 80% growth rate, which saw it add more than two dozen new employees. The company's founder Andrew Buckler is also making waves in the field, presenting two oral abstracts at the Society of Cardiovascular Computed Tomography and a clinical trial presentation at this year's ESC Preventative Cardiology Meeting.

**Nference:** Cambridge-based Nference is putting its augmented intelligence platform nferX to work to help synthesize biomedical data, partnering with the Mayo Clinic to treat everything from Covid to heart disease. Nference and the Mayo Clinic continued their partnership this year and launched a new company, Anumana, to bring to market new digital sensor diagnostics for treating heart disease. Nference also worked to bring to light new information about Covid, including findings on racial disparities and vaccine effectiveness, with one study cited by White House Covid-19 task force officials.

**Shawmut Corp:** This advanced materials and textile company is a little different from the others in its category, but with no less an impact. Shawmut sprang to action during the pandemic, moving to develop an N95 mask last year and getting federal approval just a few months later, in February 2021. In partnership with the Fallon Co. and using a \$2.7 million grant from Massachusetts' Manufacturing Emergency Response Team, Shawmut made big contributions to public health, producing millions of masks that also earned good reviews for comfort.

**Uwill:** Uwill launched in the summer of 2020 to try to solve the campus mental health crisis with a new platform connecting students to licensed counselors in real time, and it has grown its client base by 600% year-over-year. The company now serves 500,000 students and has scheduled more than 150,000 therapy sessions via video, phone, chat and message.

## Robotics

These companies walked, talked and sensed their way to success in 2021.

**6 River Systems:** This Waltham warehouse automation company fought through Covid-19, global supply chain disruptions, flooding and the Suez Canal blockage to launch two new innovative features in 2021: The Bridge, a software tool that helps managers and executives get real-time operational data, and remote deployment, which allowed new customers to bring 6RS' robots (named Chuck) on board remotely. The company's customers include Office Depot, Crocs and XPO Logistics.

**Gelsight:** Gelsight, a tactile-sensing tech startup, was all over the place this year, with an especially strong month in October. The company raised \$6 million as part of a \$10 million offering of debt and other securities. Earlier this month, it was one of the first companies to align with the rebranded Meta (formerly Facebook) to manufacture and sell DIGIT, a tactile sensor designed to help robots learn the sense of touch.

**Owl Labs:** Is it any surprise that a startup focused on remote work thrived in 2021? After opening a new Boston headquarters late last year, the company founded by two iRobot alumni launched a big product a few weeks ago, the Meeting HQ, a new control panel to go along with the company's signature owl device. It also introduced a new Whiteboard Owl, a dedicated camera that adds any in-room whiteboard to videoconferences. The firm's products are now used by more than 75,000 companies worldwide and thousands of schools and universities.

**Southie Autonomy:** This robotics firm builds no-code software that enables industrial robots to be re-purposed and re-deployed. In 2021, the Boston startup was a MassChallenge finalist. Southie Autonomy picked up a new partnership with digital supply chain company Nulogy and continued to make waves in the robotics field.

**SuperPedestrian:** SuperPedestrian, a Cambridge firm developing electrified and AI technologies for micromobility vehicles, rolled out a new scooter fleet in Bordeaux and other cities this year and acquired Navmatic, a startup that helps micromobility operators locate vehicles and correct their movements in real time. That follows another acquisition and a big fundraise in 2020, which set up SuperPedestrian for this year's success.

**Verve Motion:** Verve's product SafeLift, a lightweight exosuit for industrial workers, powered the startup to a big 2021. Spun out of Harvard and the Wyss Institute, Verve raised a \$15 million Series A after a pilot with the ADUSA Supply Chain network working with grocery distribution employees to improve worker health and safety.

## Clean and Green Tech

How Boston's companies taking on the world's biggest problem fared this year.

**6k:** This North Andover firm has developed and manufactured the world's only microwave production plasma platform, technology that makes advanced materials primarily for energy storage and additive manufacturing. This year, 6K raised \$51 million in Series C funding, announced a new Battery Center of Excellence and made plans to triple the size of its factory in the coming years. The company also added former congressman Joe Kennedy III, who focused on clean energy in his time on Capitol Hill, to its board of directors.

**Agilitas Energy:** Renewable energy company Agilitas' explosive growth continued this year as it became the largest distributed solar and storage developer in the Northeast. Agilitas acquired a Boston battery storage firm this year and launched its seventh project – a solar and storage project in Williamsburg – under the state's Solar Massachusetts Renewable Target (SMART) program. The company says it's poised for an annual growth rate of 70% over the next three years.

**Electric Hydrogen:** This green hydrogen startup launched in June with \$24 million in Series A funding led by Bill Gates' Breakthrough Energy, and it was only a few months later that it picked up its next investment from another mission-driven firm, Energy Impact Partners. The company has grown more than 500% since the spring as it works toward its goal of delivering large quantities of green hydrogen at prices equivalent to fossil fuels. To do that, Electric Hydrogen is working on reimagining the design and manufacture of hydrogen electrolysis systems, which when powered by renewable sources can create renewable hydrogen.

**Heila Technologies:** This MIT-born company, based in Greentown Labs, has had a big 12 months. Heila's expertise is in the integration and operation of distributed energy resources (DERs), and its mission is to transform the energy industry. In the past year, Heila has raised a \$3 million equity investment, doubled the size of its team, earned a \$1 million NSF grant and landed on Guidehouse's list of the Top 16 microgrid control companies, the only startup to receive that distinction.

**Inari:** Inari is another Boston startup that gained unicorn status in 2021. A \$208 million Series D fundraise in May brought the seed design agtech firm to a \$1.2 billion valuation. Over the past year, Inari attracted leading talent such as IBM veteran Rania Khalaf, who was named the company's first chief information and data officer in September. The company also received invitation to join the World Economic Forum's Global Innovators Community. Inari is trying to build a catalyst coalition focused on activating 10,000 entrepreneurs to prioritize bringing "nature-positive" innovations to 100 million farmers.

**Motif FoodWorks:** This plant-based food startup kept innovating in 2021, with new food tech releases, scientific breakthroughs and investment milestones throughout the year. The Boston company unveiled a new muscle

protein, Hemami, and ingredient, Appetex, which it put to the test through sandwiches at the eatery Coolgreens. Investors have been paying attention: Motif announced a \$226 million Series B round in June, led by the Ontario Teachers' Pension plan, a record fundraiser for a food tech company.

**XL Fleet:** After going public via a SPAC merger in late 2020, the fleet electrification firm has been booming. XL Fleet has grown its headcount by almost 300% and acquired a company to launch a new branch of its business, XL Grid. Now one of the largest clean energy companies in Massachusetts, XL Fleet is looking to continue its growth.

## Software

There were almost too many to choose from, but here's what stood out

**Aidentified:** Aidentified had a huge year. The Boston startup co-founded by twin brothers Tom and Darr Aley in 2017 is building an AI-powered relationship-based sales-prospecting platform that combines professional and personal data. The company secured \$10 million in Series A funding in February, and has quadrupled its customer count in 2021, adding 420 new clients. Aidentified's revenue also grew by more than 700% as it doubled its employee headcount and brought on several new key executives.

**HYCU:** One of Boston's fastest-growing software startups is HYCU. The company, which provides multi-cloud backup and recovery services for mid-market and enterprise customers, thrived in 2021. It raised \$87.5M from Bain Capital Ventures, the largest Series A investment by the firm to date. It added 65 employees in the first few months after that employment and is on track to add more than 100 employees in the Boston area by the end of the year.

**Klaviyo:** This customer data and marketing automation company has doubled its customer base over the last 12 months as it launched two features of its platform, Klaviyo SMS and Benchmarks. Klaviyo is also on track to double its employee count by the end of 2021 to go along with a new Boston office. The startup also had massive back-to-back funding announcements: six months after its \$200 million Series C announcement in November 2020, Klaviyo said it raised a \$320 million Series D round of funding led by Sands Capital.

**Nexthink:** The digital employee experience management software startup grew big time this year, bringing in \$180 million in Series D financing and earning a \$1.1 billion valuation. The firm also signed more than 50 new customers and expanded its employee headcount by 36% while growing revenue by more than 100%. Among all that, Nexthink launched its new "Application Experience" product which helps IT teams understand performance at the application level.

**Rendever:** Rendever's virtual reality platform for seniors made a splash this year. The company's software and device are now being used by 300 enterprise clients across the globe, and revenue doubled in 2021 as the company's team more than tripled in size from six to 22. Its platform was used in 12,000 sessions in the past year alone. And it's had extensive research funded by several federal agencies.

**Solo.io:** The Cambridge application networking startup rolled out a number of new product offerings, brought in a new director of engineering, hosted a digital user conference, and saw explosive growth in employee count and customers. Oh, and then there was the new unicorn status: a \$135 million Series C round brought the female-founded startup's valuation up over \$1 billion.

**Voatz:** The mobile election platform Voatz became the first mobile app to be used in a U.S. presidential election at the end of 2020, and that wasn't even its biggest accomplishment: the platform was used by Venezuela to conduct a referendum in December for citizens at home, and overseas. 1.7 million

people voted on the Venezuelan presidency through the app.

**Wasabi Technologies:** The cloud storage company Wasabi had its best year yet in 2021. The company closed a \$137 million Series C round, grew to 130 employees globally, and reached 27,000 customers worldwide while surpassing one exabyte of storage deployed. As the analyst firm IDC put it, Wasabi "shaped the year" with its expansion of infrastructure-as-a-service features.

## Fintech

A volatile economy didn't stop these startups from gaining traction.

**Algorand:** The cryptocurrency world is abuzz about Algorand. The blockchain platform founded by MIT professor Silvio Micali keeps racking up achievements and partnerships. Just in the last few months, its platform has been used for board games, NFT marketplaces, the Colombian government's vaccine passport system and a supply-chain system put together by Italy's largest olive oil producers. And its cryptocurrency ALGO is up more than 200% from its 2019 launch. Algorand also partnered with the World Chess Championship.

**Aliaswire:** Aliaswire, which provides digital payment and credit solutions for businesses and financial institutions, was pointed in the right direction this year. The firm doubled its employee headcount in the last 12 months and is on track to double its revenue in 2021, while multiplying its number of payment transactions by seven year over year. Aliaswire also picked up \$6 million in venture funding in June, the first such investment in its history, and brought on industry veterans to join its board and executive team.

**FiVerity:** FiVerity was founded in 2017 but came into its own this year. The startup, which straddles the worlds of fintech and cybersecurity, launched a new Cyber Fraud Network, the first collaborative system built to combat synthetic identity fraud (SIF). FiVerity raised \$2 million along the way and is working with the Federal Reserve to quantify the problem of SIF.

**Hometap:** Hometap is a Boston startup looking to disrupt the real estate market by providing an alternative to loans called a "home equity investment," providing cash in exchange for a share in the home's future value. The company made a key executive hire in April, bringing tech industry veteran Moe Khan onboard as vice president of engineering. It also expanded operations to Pennsylvania, Washington and Ohio, extending its reach to 15 states. And during the second half of the pandemic, it pivoted to go remote with previously in-person processes, such as home appraisals, financings and county recordings.

**Lendbuzz:** Lendbuzz, which partners with auto dealerships to offer a car loan platform for people who lack credit history, had a big year in more ways than one. The Boston-based startup doubled its number of employees to more than 100 in the past year, and also raised a \$360 million investment round, including \$60 million in a Series C round and \$300 million in debt financing led by Goldman Sachs Bank USA. LendBuzz also recently opened an R&D center in Tel Aviv, Israel to diversify its engineering hires.

**MineralTree:** The accounts payable (AP) automation market is booming, and Waltham-based MineralTree is capitalizing on it. The company, our Tech Madness champion from earlier this year, was named to several lists of the country's fastest growing private companies in 2021. It also launched a new key product this year: integrated AP analytics capabilities to help customers get insight into every aspect of the AP process.

**Numerated:** Numerated, a digital lending platform for business banking, quickly adapted its technology to support Paycheck Protection Program loans and enable remote business between banks and customers. The Boston startup helped banks and credit unions extend PPP loans totaling more than \$50 billion to over 400,000 businesses. It also made the Inc. 5000



while nearly tripling headcount and becoming one of the largest fintechs in Massachusetts.

### Cybersecurity

Boston keeps thriving as a cyber hub, and these companies helped bolster that growth this year.

**Aqua Security:** Unicorn status on the back of a \$135 million Series E was the crowning achievement of 2021 for Aqua Security, which is building a Cloud Native Security Platform aimed at protecting cloud infrastructure and applications. The company, founded in 2015, is now looking to scale globally and has doubled its customers including 25 of the Fortune 100. And in the past year Aqua has hired a new customer success officer, chief marketing officer and chief revenue officer, all of whom are in the Boston area.

**Black Kite:** Third party risk management startup Black Kite just moved to Boston in January, but it's already standing out in the city's cyber sector. It raised \$22 million in Series B funding a few weeks ago, just ten months after its Series A. The company's total number of customers has grown by more than 400% over the past two years, and Black Kite is planning to double its employee headcount by the end of 2021 for the second year straight.

**Immersive Labs:** This cybersecurity firm expanded its North American headquarters in Boston this year, and it wasn't the only sign of growth for the cyber skills training platform. It grew to 260 employees globally and closed a Series C investment round, bringing its total funding to \$123 million. Immersive's customer base is growing too: it saw registered users increase by 115% over the last year alone. The startup's platform continuously tests, analyzes and optimizes the capabilities of both technical and non-technical teams.

**Onapsis:** Cyber startup Onapsis had a big 2021 in revenue, sales and employee headcount growth. But maybe the biggest achievement was a new report and joint threat alert issued in April jointly with SAP, the first time the software giant has partnered with a cyber firm to issue research. The report raised issues with a major cyber and governance gap in SAP's business critical applications and led to alerts from the U.S. Department of Homeland Security and other government agencies. Onapsis also made Inc. and Deloitte's lists of fastest-growing private companies in the last year.

**SecZetta:** SecZetta moved from Rhode Island to Massachusetts at the end of 2020, and the change of scenery portended big things for the cyber firm, which develops third-party identity risk technologies. The startup's mastery in its space led to a \$20.5 million Series B in September and recognition in a number of reports from leading industry analysts. The company is on track to grow to more than 100 total employees by the end of this year.

### Apparel and consumer products

Otherwise known as the "cool stuff" category.

**BLADELIFE:** This Boston startup, which launched in early 2021, builds a razor case aimed at keeping blades dry and airtight to ensure that they last longer. The company is projecting that it will sell 500 units per month by the first quarter of next year, and more than 1,000 by Q2. It's already worked its way into the top 100 Amazon Best Sellers for razor and brush stands. The company's founders are David Valdez, a former professional baseball player, and Peter Gladstone, a marketer who works at the Harvard Innovation Labs and spent years in marketing at Gillette.

**Flare:** It's not just the viral social media moments and awards from prestigious publications for Flare, a Boston-area company that creates bracelets

that connect to a phone by bluetooth to signal your location to a friend, dial 911 or call your phone. It's also a banner year of sales for the brand that has grown more than 55 times its size in the last year and is now in the hands of more than 15,000 customers. What makes it all the more impressive? Flare's stated goal is to fight for policies that make its own product obsolete.

**Liteboxer:** Liteboxer, which sells an at-home boxing workout machine, had a good year both in selling its product and attracting investors. The company doubled its quarter-over-quarter sales between Q1 and Q2 2021, grew its team by 100% since 2020 and raised a \$20 million Series A funding round led by Nimble Ventures and with participation from some musical celebrities like Pitbull and Timbaland. The company was certainly worth watching in 2021.

**Neurable:** Neurable launched in the spring with a crowdfunding campaign for its headphones, which hit the neurotechnology startup's goal in 30 minutes. The company is bringing advanced tech to the consumer market with its smart Enten headphones which Neurable pitches as helping users increase focus and productivity by recording brain activity. Co-founder Ramses Alcaide was also a hit on the speaking circuit, most recently presenting at TedX Boston.

### Ecosystem supporters

It takes more than just startups to fuel innovation.

**Boston College High School:** BC High launched the Shields Center for Innovation this year to help ensure that its students are ready to contribute to a changing economy. With a \$5 million donation from alumnus Jack Shields, an investment and healthcare executive, the center held events featuring high-profile speakers and a challenge which gave students prizes for innovative projects including vertical hydroponics and a new farmer's market.

**Clora:** There's something special about startups aimed at helping other startups. Clora is trying to solve the life sciences hiring crisis by matching companies with "flexible, on-demand expertise." The technology platform worked with younger firms in 2021, like Vaxxinity, and more established players like Moderna. Clora also cofounded a podcast, Biotech 2050, which recently hit 75,000 listens.

**Foundation for Business Equity:** This nonprofit, which provides advisory services and capital for business leaders of color, had a strong year. The group picked up new funders, like Bain Capital, which announced a five year, \$2.5 million commitment, and the Cummings Foundation, while also continuing its expansion with new participating businesses. 60 local companies have participated in FBE's Business Equity Initiative, with \$7 million of growth capital directly invested, helping to create 205 new jobs and \$120 million in new revenue.

**Mass Technology Leadership Council:** MassTLC launched its Tech Compact for Social Justice in August 2020, and since then it's gotten more than 90 companies to sign and make over 400 commitments, a broad range of promises to increase racial diversity and improve opportunity for minorities in the workplace. It's also sent nearly 200 individuals through Board Ready Bootcamp, a comprehensive course on preparing women, people of color, LBTQIA+ and other underrepresented tech leaders for boardroom roles.

**The Leadership Consortium:** This leadership accelerator founded in 2018 partners with companies to help improve and diversify their talent. The company nearly doubled its size in 2021, scaled programming and worked with some of the biggest companies in the world. TLC has had more than 2,400 participants come through its program.