ILLINOIS

CORPORATE **STARTUP**

CHALLENGE

Program Insights Report

2016

ILLINOIS SCIENCE &
TECHNOLOGY COALITION

TABLE OF CONTENTS

INTRODUCTION

The Illinois Corporate-Startup Challenge is a national award–winning program that connects global corporations with the entrepreneurial community for mutual benefit. Developed in 2013 by the Illinois Science & Technology Coalition (ISTC), in partnership with consultant Freshwater Advisors, the program assembles a class of Fortune 1000 corporations every six months and helps them forge impactful partnerships (pilots/contracts, strategic partnerships, investments, and mentorship) with startup and emerging growth companies.

Despite growing interest in sourcing innovation outside their walls, corporations have struggled to find efficient and organized ways to engage with innovative young companies. Through a highly curated and streamlined process, the Corporate-Startup Challenge helps corporations find the most relevant startups based on their needs and drives real business outcomes. This report highlights the key learnings and best practices identified after running 4 program cycles with 14 global corporations.
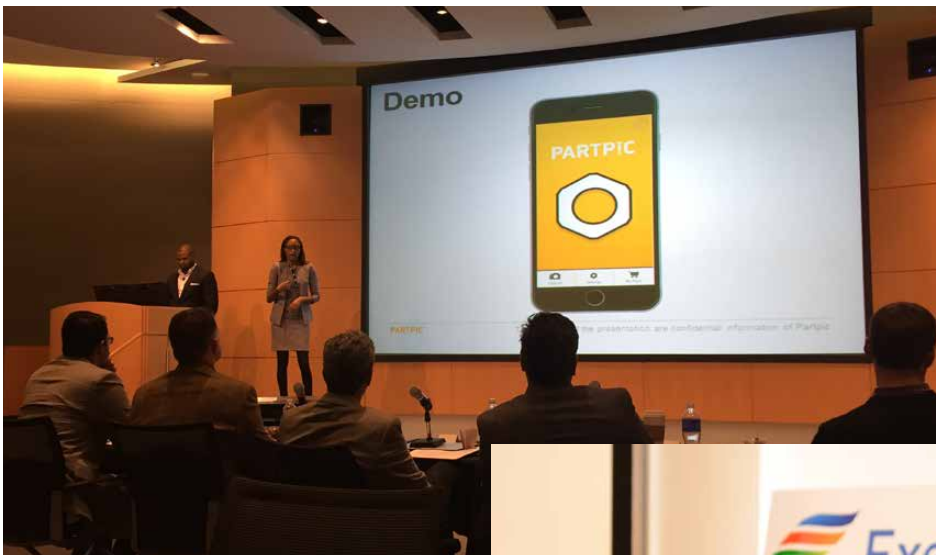
Rohit Pasam, Founder and CEO of Xaptum, presents at Exelon demo day, September 2014.

Larry Kaplan, CEO of Impossible Objects, presents at Grainger demo day, December 2015.

PROGRAM DNA AND OUTCOMES

The Corporate-Startup Challenge process begins when participating corporations convene a team of decision-makers from across the organization to identify a set of "opportunity areas." These opportunity areas represent specific technologies of interest and challenges that might be addressed through partnerships with startup companies.

Based on these opportunity areas, ISTC scouts potential startup matches through a statewide network of more than 50 community referral partners. After vetting the pool of eligible startups, each corporation is provided with a customized digital portfolio with high-level diligence on 25 to 40 of the most relevant startups. The process culminates in private demo day showcases where corporations invite 10 to 15 startups to present to the executive suite (CMO, CTO, CIO, corporate venture, etc.) and propose opportunities to collaborate.

Participating corporations

Fall 2013	**Cycle 1**	Allstate. You're in good hands.	JOHN DEERE	molex®	MOTOROLA MOBILITY / Walgreens
Summer 2014	**Cycle 2**	ADM	Exelon.	HYATT®	
Spring 2015	**Cycle 3**	Danfoss	Microsoft / CHICAGO PUBLIC LIBRARY	StateFarm™	UL
Fall 2015	**Cycle 4**	Allstate. You're in good hands.	CAT	GRAINGER. FOR THE ONES WHO GET IT DONE	

To date, 120 startups have presented at 15 corporate demo days. Of these, at least 50 are actively exploring potential engagements, including mentorship, joint development agreements/pilot engagements, strategic partnerships, contracts, or investment opportunities; as of this report, 15 have secured formal partnerships.

We surveyed every startup that pitched at one or more demo day to get their feedback on the program process. When asked about their biggest priority when working with corporations, 62% said "securing corporate customer," 23% said "strategic partnerships," 7% said "funding/investment," 4% said "mentorship or domain expertise," and 6% identified "other."

Corporate-Startup Challenge by the numbers

Companies referred to program	Companies interviewed/ screened	Companies included in corporate portfolios	Companies that pitched at demo day events	Companies that received post–demo day followup	Active Engagements	Secured Outcomes
685 ▸	**285** ▸	**211** ▸	**120** ▸	**77** ▸	**50** ▸	**15**
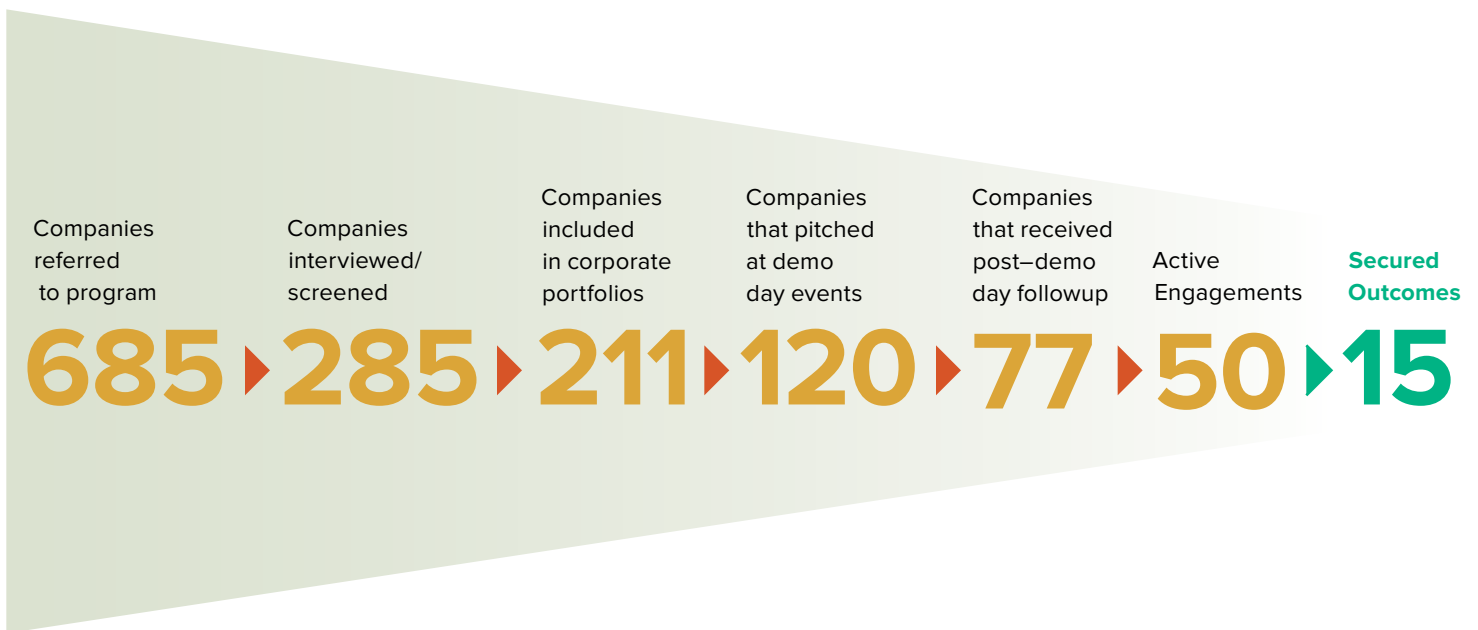
SUCCESS STORIES

The Corporate-Startup Challenge has facilitated partnerships between corporations and startups that have taken many forms, including mentorship engagements, investments, pilot contracts, joint development, and strategic partnerships. Below is a sample of the outcomes realized through the program.

Servabo secured a formal mentorship partnership and participated in Allstate's Purple Purse and Supplier Diversity programs.

SimpleRelevance developed a professional-services agreement with Allstate that resulted in a five-month, paid pilot.

NuCurrent secured an investment with Molex through strategic partnership that also involves collaboration on design, fabrication, and customer engagement.

Xerion received technical input and conducted a site visit with Molex.

Motorola Mobility sponsored SiNode's participation in the Mobile World Congress, and the two companies are discussing a potential development agreement.

ADM announced a pilot with Veriflow Systems to apply their novel approach to network verification to one of ADM's corn processing facilities.

TraknProtect conducted a pilot and signed a contract with a Hyatt property, in addition to engaging at least five other properties.
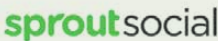
Sprout Social secured a contract to deploy its product at nearly 175 Hyatt properties worldwide.

CORPORATE INNOVATION NEEDS AND TRENDS

Over three years and four program cohorts, we observed a number of trends in the technology interests of large corporations. The most common need expressed was related to data. We noticed corporations during the first cohort typically expressed a blanket interest in big data technology, which trended over time to more refined interests in machine learning and natural language processing technologies. The infographic below ranks the most commonly identified innovation needs by number of corporations that expressed interest in that area.

Innovation areas ranked by corporate interest

1 Data analytics: Big data solutions and advanced/predictive insights

2 Internet of Things and "connected world" (auto, home, industrial) technologies

3 Sensor technology

4 Power management, energy efficiency, and battery technologies

5 UX/UI solutions and experiences

6 Wearable technologies

7 3D Printing

8 Cybersecurity solutions

9 Materials science technologies

COMMUNITY REFERRAL PARTNERS

Startups that participate in the Corporate-Startup Challenge are referred through a network of community partners throughout the state of Illinois. These referral partners span four different categories: research universities and labs; civic, nonprofit, and industry organizations; incubators and accelerators; and angel and venture organizations. The number of startups referred by each category of community partner is shown below.

Venture capital organizations

114

Universities and labs

80

105

Civic, nonprofit, and industry organizations

88

Incubators and accelerators

Note: Companies may have been referred multiple times over the four program cycles, but they are only counted once per partner in this figure.

Community partners

Civic, nonprofit, and industry organizations

Chicago Innovation Awards

Illinois Technology Association

Clean Energy Trust

Illinois Department of Commerce and Economic Opportunity

Peoria CEO Council

Heartland Mobile Council

Illinois Medical District Commission

Freshwater Advisors

TIE Midwest

Venture Connects

Chicago NEXT

Startup Leadership Program

Women's Business Development Center

Built In Chicago

Chicagoland Chamber of Commerce

CME Group

Quad Cities Chamber of Commerce

Incubators and accelerators

Catapult

1871

MATTER

TechStars

Impact Engine

InsightPD

Venturelab/
Independence

Catalyze Chicago

Sandbox Industries

EIGERLab

iBIO/Propel

Junto Institute

Universities and labs

University of Illinois at
Urbana-Champaign

Northwestern
University

Illinois Institute of
Technology

University of Chicago

Northern Illinois
University

Bradley University

Sivananthan
Laboratories

Western Illinois
University

Depaul University

Fermilab

UI LABS

Argonne National
Laboratory

Gas Technology
Institute

Loyola University

Southern Illinois
University

Venture capital organizations

Energy Foundry

Hyde Park Angels

Chicago Ventures

Pritzker Group
Venture Capital

Jump Capital

MATH Ventures

Origin Ventures

New World Ventures

IrishAngels

Lightbank

7Wire Ventures

G2T3V

i2A Fund

IllinoisVENTURES

MK Capital

OCA Ventures

PrivateBank

Touchpoint Capital
Partners

Treehouse Adventures

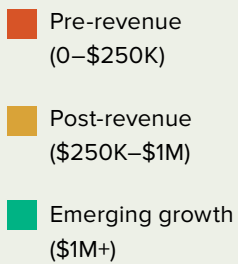# DEMO DAY STARTUPS BY INDUSTRY CONCENTRATION

Illinois has a rich community of early-stage companies representing a variety of industry sectors. From the 285 startups that were interviewed and screened for the program, the 120 startups invited to at least one demo day offer a sample of the most in-demand technologies from a corporate perspective. The charts below explore these trends.
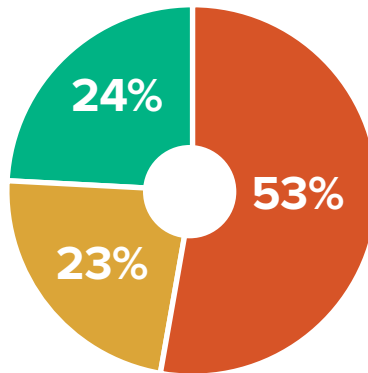
11 Internet of Things

8 Geospatial and location-based services

9 Manufacturing

19 Sensors

29 Data analytics and predictive analytics

10 Energy and power management

14 Material science

10 Imaging technology

9 Electronics

12 Data visualization

Note: Industry classifications were counted only once per startup, even if the company participated in multiple demo day events.
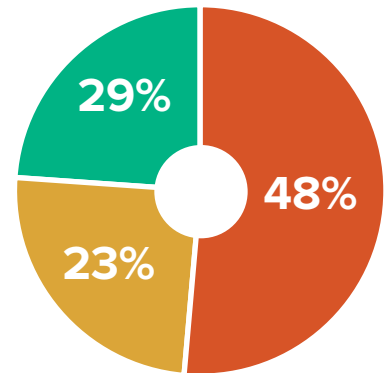
STARTUP OUTCOMES BY GROWTH STAGE

Startups participating in the Corporate-Startup Challenge are grouped by growth stage into three categories, based on annual revenue: pre-revenue ($0–$250K), post-revenue ($250K–$1M), and emerging growth ($1M+). The graphs below show the breakdown of companies along these categories through the various stages of the program. The concentration of pre-revenue companies reflects a strong appetite from corporations to look earlier into the innovation pipeline for new technologies.
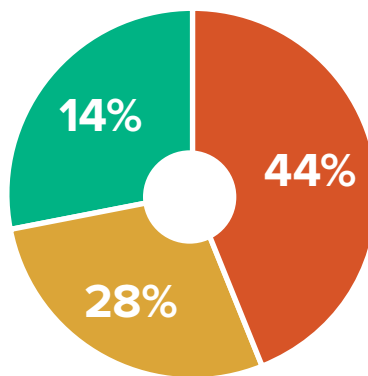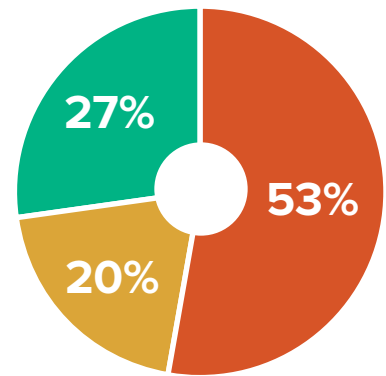
Legend:
- ■ Pre-revenue (0–$250K)
- ■ Post-revenue ($250K–$1M)
- ■ Emerging growth ($1M+)

Selected for demo day
(120 startups)

- 53% Pre-revenue
- 23% Post-revenue
- 24% Emerging growth

Follow-up engagement
(77 startups)

- 48% Pre-revenue
- 23% Post-revenue
- 29% Emerging growth

Active projects
(50 startups)

- 44% Pre-revenue
- 28% Post-revenue
- 14% Emerging growth

Wins
(15 startups)

- 53% Pre-revenue
- 20% Post-revenue
- 27% Emerging growth

Note: "Active projects" and "Wins" are counted by startup/corporate pairing, so a startup was counted twice if it had engagements or wins with multiple corporations.

DEMO DAY STARTUPS BY CITY

While the Corporate-Startup Challenge initially focused exclusively on Illinois-based companies, the program ultimately expanded to include startups from the greater Midwest region and other parts of the country. In several cases, referral partners nominated companies outside the region (for example, portfolio companies, alumni startups), and we also conducted direct outreach to several out-of-state companies where the fit was particularly strong. In total, Illinois companies comprised 83 percent of the startups invited to pitch at the demo days.

Minneapolis, MN
Birmingham, MI
Henrietta, NY
Cambridge, MA
Milwaukee, WI
Boone, IA
See inset map below
Golden, CO
Galesburg, IL
Morton, IL
LaFayette, IN
Washington, DC
Roseville, IL
18
2 Indianapolis, IN
Champaign–Urbana, IL
St. Louis, MO
Durnham, NC
Nashville, TN
Atlanta, GA
Austin, TX 4
Houston, TX

Northern Illinois Inset Map

Barrington
Des Plaines
Sycamore
Northbrook
DeKalb
Schaumburg
Evanston
Elmhurst
Batavia
Wheaton
63 Chicago
Aurora
Lisle
Oak Park
Naperville
New Lenox

KEY INSIGHTS

ISTC met with all the program's corporate participants to collect feedback about processes and outcomes, as well as to gather insight into corporate innovation practices and challenges. This feedback is summarized below and is being used to improve and refine the Corporate-Startup Challenge program.

Startup scouting and project kickoff

The value of curation
We received nearly unanimous feedback that ISTC's level of curation (scouting relevant startup companies by listening carefully to identified corporate needs) is the program's most significant differentiator compared with other startup matchmaking efforts. By serving as an extra set of hands to scour the market for innovation and quality, the Corporate-Startup Challenge saves companies time and resources.

Corporate quarterback is essential
Based on the organizations that had the most success in the Corporate-Startup Challenge, we learned that a central point of contact within the corporation is absolutely critical. The function and level of this person may vary between corporations, but the process is most successful when overseen by an individual with visibility across the organization who can identify and manage the key people assigned to demo day and post–demo day follow-up tasks.

Building a game plan
We learned that proactive planning and clear expectations lead to more successful outcomes. Corporations need a line of sight into the spectrum of outcomes that could be realized through this process and how potential partnerships would move forward after demo day. This includes organizing staff early to plan for demo day and post–demo day activities, as well as identifying in advance the tools they will need (for example, NDAs, partnership agreement templates, engagement from procurement departments, legal requirements) to form partnerships.

Demo days

Galvanizing internal innovation
The secondary effects of demo day (networking within the corporation and exposing employees to ideas outside their usual work) were seen as highly valuable from the corporate perspective. We also learned that bringing together various divisions within a corporation uncovers ways to integrate new strategies horizontally across the enterprise.

Securing the right audience
Corporations found the most success and relevance when the right corporate audience was present to evaluate each startup, either through assigning startup presentations into different sections for different team members or rotating judges for each presentation.

Formalizing the evaluation process
Successful demo days generally had an established evaluation process to collect, organize, and relay feedback to the startups. We found that the most successful demo days had teams that planned the evaluation process thoroughly in advance. In this way, judges came to the event prepared with the right questions, along with preliminary thoughts about how a partnership might unfold with each company.

BEST PRACTICES: CATERPILLAR

Caterpillar demo day, November 2015.

Caterpillar's demo day took place on November 4, 2015, at their Mossville, Illinois, campus. The company's process to organize and execute the event is a leading example to other corporations interested in forging partnerships with early-stage companies.

Discovery
Caterpillar came to their discovery session with a well-defined list of technology interest areas. They had a firm understanding of what emerging technologies were relevant to each division of the company, and they were able to prioritize opportunities based on which areas offered the most promising path for engagement.

Advanced planning
Caterpillar's internal process was spearheaded by Nigel Smith, the strategic alliances manager for the company's analytics division. Starting six months before demo day, Nigel held briefing meetings twice a month with a team of Caterpillar staff (including legal, administrative, and communications personnel) to coordinate demo day planning. In particular, these meetings allowed Nigel to secure the right audience and judges for demo day, create a robust evaluation template, and develop a concrete plan for post–demo day engagement with each startup.

Demo day

The success of Caterpillar's demo day was due in large part to the startup evaluation strategy that the company developed. Caterpillar chose startups from the portfolio based strictly on how likely they were to solve a real and tangible problem faced by one of Caterpillar's divisions. And in addition to rotating decision-makers to serve on the judging panel based on expertise, Cat developed an app that was used by the more than 70 employees in the audience to provide crowdsourced feedback. In this way, the company quantified the potential for engaging with each startup across a variety of divisions. Cat also produced a video highlighting their demo day.

Meaningful follow-up

Caterpillar's evaluation system allowed the company to provide rich and meaningful feedback and to pursue tangible follow-up engagement with each of the 10 startups that pitched. All initial communication was channeled and coordinated by the Caterpillar Ventures team, who then delegated follow-up meetings to hand-picked leaders across the company. Furthermore, Cat's established infrastructure allowed them to efficiently coordinate post–demo day activity, with an eye toward pilot and demonstration projects. Caterpillar Ventures routinely explores partnerships with early-stage companies, and this made it easier for Cat to develop and track exploratory partnerships with startups.

BEST PRACTICES: MOLEX

Molex's demo day took place on December 12, 2013, at its headquarters in Lisle, Illinois. The program was spearheaded internally by Director of Corporate Development Lily Yeung and VP of Marketing and Communications Brian Krause. Molex's corporate development group serves as a strong example of how effective the right division can be when forming partnerships with startup companies. Molex's corporate development team has existing staff resources and processes in place for vetting early-stage technologies, conducting market assessments, and structuring investment deals. Their company also has an established relationship with Hyde Park Angels to assist with deal flow and vetting early-stage companies. Because Molex has an experienced team that is empowered to act, they were able to formalize an investment deal and strategic partnership with NuCurrent, one of the demo day startups, quickly and efficiently.

Molex demo day, December 2013.

Building impactful partnerships

Company culture
A risk-averse culture that does not incentivize employees to seek innovative solutions can pose a significant challenge to forming startup partnerships. Throughout four cycles, the Corporate-Startup Challenge project team learned the importance of picking the right problems to solve and avoiding areas where startups would be unable to provide scalable solutions.

Organizational barriers
Many corporations lack the organizational or legal infrastructure to enter into quick, experimental engagements with startups. Corporations with higher success rates had at least some precedent or process in place for technology licensing, joint development agreements, or structuring investments. Companies with dedicated resources and processes were able to quickly jump into further diligence and move deals forward.

Internal champion
After demo day, the most successful outcomes occur when startups are assigned to entrepreneurial "champions" within the corporation. These individuals are ideally subject-matter experts who can conduct further diligence and explore potential opportunities. The internal champion needs a personal sense of buy-in, strategy alignment, and enough budget and autonomy to pursue the relationship.

Hyatt demo day, October 2014.

Acknowledgements

The Corporate-Startup Challenge team would like to thank all the startups, corporations, and community referral partners that have made the program a success for the business and innovation community in Illinois.

We'd also like to acknowledge the program team—Mark Harris, David Machajewski, and Alya Adamany Woods—as well as David Weinstein and his team at Freshwater Advisors, including Isaac Sinnott, Sara Block, and Tomer Yogev, for helping to build, support, and grow the program.

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