

Third Quarter 2017-2018

\$244K
Support
for
companies



134
Companies
Served



15
Companies
Created



47.5
jobs created

470
current FTEs

Jobs



675
Event
Attendees



**Funds
Raised**
\$8.1 M
investments & grants

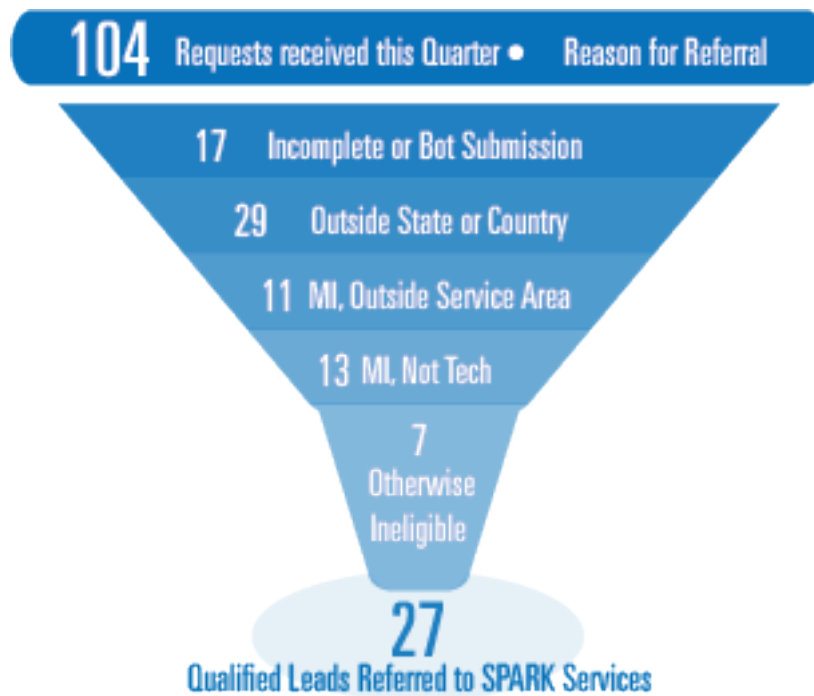
Ann Arbor SPARK works to advance the economy of the Ann Arbor region by establishing the area as a desired place for business expansion and location... by identifying and meeting the needs of business at every stage, from those that are established to those working to successfully commercialize innovations. For more information visit: www.annarborusa.org

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Ann Arbor-Ypsilanti Smart Zone Local Development Finance Authority

Ann Arbor SPARK Quarterly Report: January 1, 2018 –March 31, 2018

Business Accelerator Intake – Phase I



Companies Created

The following companies were created this quarter per the definition listed in the glossary:

| Uniq ID | Company Description |
|---------------------|--|
| 8778 | Portable oxygen concentration device. |
| 8832 | Accurate security breach detection tool with actionable information for IT teams to detect and respond to cyber security events. |
| 11120 | Cross-MBA trips for students from several universities before their MBA program begins. |
| 8834 | Month-to-month car subscription with insurance, maintenance and roadside assistance included. |
| 8769 | Automated legal document generation software. |
| 8831 | Matching hunters with land and lodging to hunt wild game with sponsored hunting outfitters. |
| 8774 | V2X software to make roads and vehicle-to-everything interactions safer. |
| 8862 | Mobile learning platforms to help young people combat sexual violence and misconduct. |
| 8884 | Interactive financial education suite of services that seeks to empower young adults and their families. |
| 8631 | Productizing marketing growth tools. |
| 8651 | Proprietary chip, camera, and image processing software package, to verify that a tissue sample has enough tissue to make a diagnosis. |
| 8453 | Wireless wetness detection system with IoT capability. |
| 8377 | Software to enable companies to detect and respond to ransomware. |
| 8657 | Digital health predictive analytics company initially targeting critical care and emergency wards in hospitals of all sizes. |
| 8794 | Software application that guides home buyers by making the transaction steps transparent to all parties. |
| 15 Companies | |

Boot Camp

The following teams are progressing through the Boot Camp program. Kickoff was on March 26th, check in day was held April 5th, and the two Mentor Days are scheduled for May 7th and 8th.

| Uniq ID | Team Description | FTEs |
|-------------------------|--|-----------|
| 10191 | Wireless link that offers fiber-like speeds for the backhaul and last-mile connection in the network. | 1 |
| 11105 | Do it yourself financial planning in a digital platform. | 1 |
| 11110 | Web-based software package that allows patients to complete their personal and family history at home | 6 |
| 11116 | FAA Compliant Drone Swarm Technology. | 2 |
| 11120 | Cross-MBA trips for students from several Universities before their MBA program begins. | 2 |
| 8001 | Radiation measurement and display enabled by modern technologies. | 1 |
| 8440 | Web platform to facilitate end of life decisions | 3 |
| 8769 | Automated legal document generation software. | 1 |
| 8794 | Software application that guides home buyers by making the transaction steps transparent to all parties. | 1 |
| 8845 | Virtual reality entertainment business. | 2 |
| 8862 | Mobile learning platforms to help young people combat sexual violence and misconduct. | 2 |
| 8889 | Products designed to mimic natural predators that protect properties from wildlife damage. | 2 |
| 9979 | STEM-based drone model kit for educational and general use. | 1 |
| Total (13 Teams) | | 25 |

Work Accomplished

Look for these codes by the Uniq ID in the following tables.

M = Mobility Company

Y = Ypsilanti Company

U = University of Michigan affiliated

The following companies were evaluated through [Phase II] Due Diligence:

| Uniq ID | Company Description | FTEs | Billed Support |
|-----------------------------|---|------------|----------------|
| 2028 | Book and videos teaching Chinese to English speaking children. | 4.5 | \$600 |
| 8777 | Low cost, research-based program designed to enrich people's lives and reduce psychological distress. | 2 | \$1,000 |
| Totals (2 Companies) | | 6.5 | \$1,600 |

The following companies received [Phase III] Business Acceleration Grant support:

| Company Description | Project Description | FTEs | Billed Support |
|--|---|------|----------------|
| 10433 M | | 4 | \$4,000 |
| V2X software to make roads and vehicle-to-everything interactions safer. | Accounting Setup. | 4 | \$4,000 |
| 11127 | | 2 | \$2,100 |
| Field service software for organizations that need to manage a large number of complex facilities. | Video production. | 2 | \$2,100 |
| 3965 Y | | 1 | \$5,585 |
| Patent-pending window products that let air in but keep the rain out | Patent application. | 1 | \$5,585 |
| 4432 U | | 4 | \$95 |
| Life science research recruiting software. | International trademark registration. | 4 | \$95 |
| 5604 Y | | 1 | \$1,000 |
| Online language learning platform. | Equity incentive plan, intern and consultant agreements. | 1 | \$790 |
| Online language learning platform. | Equity incentive plan, intern and consultant agreements. | 1 | \$210 |
| 65454 | | 2 | \$128 |
| Software platform applies predictive analytics to strategic decisions regarding IP management. | IP protection, corporate conversion, initial commercial agreements. | 2 | \$128 |
| 7117 U | | 10 | \$4,617 |
| Data processing algorithms and curated genetic database software as a service. | Website design and development. | 10 | \$1,073 |
| Data processing algorithms and curated genetic database software as a service. | Website design and development. | 10 | \$248 |

| Company Description | Project Description | FTEs | Billed Support |
|--|--|------|----------------|
| Data processing algorithms and curated genetic database software as a service. | Website design and development. | 10 | \$3,297 |
| 7375 U | | 1.5 | \$18,900 |
| Mobile app for tracking and analyzing pain data. | Execute go-to-market strategy. | 1.5 | \$6,800 |
| Mobile app for tracking and analyzing pain data. | Execute go-to-market strategy. | 1.5 | \$5,700 |
| Mobile app for tracking and analyzing pain data. | Execute go-to-market strategy. | 1.5 | \$6,400 |
| 7656 | | 2 | \$1,130 |
| Platform matching corporations and law firms with vendors who provide ancillary legal services. | Create videos for general marketing collateral and social media content. | 2 | \$50 |
| Platform matching corporations and law firms with vendors who provide ancillary legal services. | Create 3 videos for lead generation, 2 videos for customer onboarding, white-papers from industry-recognized authors for content marketing. Update website to improve design and lead-gen functionality. | 2 | \$1,080 |
| 7674 M | | 5 | \$1,500 |
| Platform of sensors, software, and analytics that will harvest key data from manufacturing machines, processes, and people, and translate it to actionable intelligence. | Developer recruitment. | 5 | \$1,500 |
| 7704 U | | 1 | \$2,552 |
| Computer vision-based phone or tablet-based application for construction workers' safety and ergonomics monitoring/analysis. | Licensing and LOI negotiation. | 1 | \$1,532 |
| Computer vision-based phone or tablet-based application for construction workers' safety and ergonomics monitoring/analysis. | Licensing and LOI negotiation. | 1 | \$1,020 |
| 7754 U | | 4.5 | \$2,400 |
| Sensors and measurement devices for electromagnetic radiation enabling essential technologies. | Corporation conversion and equity plan. | 4.5 | \$2,400 |
| 7772 U | | 4 | \$500 |
| Cloud computing that runs parallel libraries resulting in large speedup. | Key business development tasks. Value proposition, business plan, revenue model, and go-to-market model development. Support investor meetings as they come up. Develop IP strategy. | 4 | \$500 |
| 7815 U | | 1 | \$380 |
| Online learning platform for contract lawyers. | Re-skin website. | 1 | \$380 |
| 7876 U | | 1 | \$2,000 |
| Wearable graphene Nano electronic alcohol sensor for real-time alcohol monitoring. | Recapitalization of the company in addition to stock option and equity incentive plan. | 1 | \$2,000 |
| 7927 U | | 2 | \$2,500 |
| Mobile platform for connecting people with the same chronic conditions. | Trademark and term sheet. | 2 | \$2,500 |

| Company Description | Project Description | FTEs | Billed Support |
|--|--|------|----------------|
| 7938 | | 2.5 | \$280 |
| Decision making software that helps users make decisions in a structured, systematic, and dynamic way. | Trademark registration. | 2.5 | \$80 |
| Decision making software that helps users make decisions in a structured, systematic, and dynamic way. | Trademark registration. | 2.5 | \$200 |
| 8037 | | 7 | \$10,000 |
| Mobile software that provides reassurance of the safety and wellbeing of aging loved ones living independently. | Rebrand/position for direct-to-consumer sales. | 7 | \$5,000 |
| Mobile software that provides reassurance of the safety and wellbeing of aging loved ones living independently. | Rebrand/position for direct-to-consumer sales. | 7 | \$5,000 |
| 8054 U | | 1 | \$9,580 |
| Synthetic nanodisks which improve vaccine performance. | Negotiate initial licensing and collaboration agreement. | 1 | \$9,580 |
| 8090 U | | 3 | \$510 |
| Cell-based assays designed for drug screens for carcinoma drug R&D. | Accounting system setup. | 3 | \$510 |
| 8230 M | | 2 | \$12,875 |
| Shared mobility on-demand by granting electronic access and multimodal management through smartphone-based platform. | Improve the UI/ UX along with customer on-boarding process. | 2 | \$2,875 |
| Shared mobility on-demand by granting electronic access and multimodal management through smartphone-based platform. | Improve the UI/ UX along with customer on-boarding process. | 2 | \$5,000 |
| Shared mobility on-demand by granting electronic access and multimodal management through smartphone-based platform. | Improve the UI/ UX along with customer on-boarding process. | 2 | \$5,000 |
| 8271 U | | 5 | \$220 |
| Evidenced Health Risk Appraisal (HRA) program and services. | Option/license, employment and contractor, employee equity incentive plan, license agreement, master services agreement. | 5 | \$220 |
| 8286 | | 2.5 | \$4,350 |
| Website built to match job seekers with startup jobs they are qualified for. | Segmentation and personalization of 4250 prospect database entries. | 2.5 | \$320 |
| Website built to match job seekers with startup jobs they are qualified for. | Segmentation and personalization of 8500 prospect database entries. | 2.5 | \$30 |
| Website built to match job seekers with startup jobs they are qualified for. | Marketing collateral and table top display design. | 2.5 | \$2,000 |
| Website built to match job seekers with startup jobs they are qualified for. | Marketing collateral and table top display design. | 2.5 | \$2,000 |
| 8364 M U | | 1.5 | \$125 |
| Programming language for Computer Numerical Control manufacturing. | Separation agreement. | 1.5 | \$125 |

| Company Description | Project Description | FTEs | Billed Support |
|---|---|------|----------------|
| 8377 | | 2 | \$1,675 |
| Software to enable companies to detect and respond to ransomware. | Delaware corporate formation with client and end user agreements. | 2 | \$755 |
| Software to enable companies to detect and respond to ransomware. | Delaware corporate formation with client and end user agreements. | 2 | \$920 |
| 8384 | | 2 | \$3,630 |
| App and cloud service to connect dietitians and their clients for efficient, timely interaction. | Full patent application. | 2 | \$3,350 |
| App and cloud service to connect dietitians and their clients for efficient, timely interaction. | Formation package, trademark package. | 2 | \$280 |
| 8393 | | 1 | \$2,167 |
| B2B marketplace where businesses can easily find quality IT professionals. | Audit and optimization, landing page creation, AdWords management, downloadable content creation. | 1 | \$1,083 |
| B2B marketplace where businesses can easily find quality IT professionals. | Audit and optimization, landing page creation, AdWords management, downloadable content creation. | 1 | \$1,083 |
| 8422 U | | 1 | \$3,643 |
| A new process to manufacture custom orthotic devices by connecting orthotists with 3D printing through the cloud. | Memorandum of Understanding, license agreement, operating agreement, preparation of friends and family note documents and a business plan supplement. | 1 | \$2,393 |
| A new process to manufacture custom orthotic devices by connecting orthotists with 3D printing through the cloud. | Conversion to C-Corp. | 1 | \$1,250 |
| 8434 | | 0.5 | \$675 |
| Instruments for single molecule detection of DNA, RNA and proteins. | Negotiation and drafting of contracts. | 0.5 | \$675 |
| 8453 | | 2 | \$150 |
| Wireless wetness detection system with IoT capability. | Corporate formation package. | 2 | \$150 |
| 8514 | | 4 | \$3,450 |
| Vulnerability assessment app for the security assessment process. | Write video script. | 4 | \$250 |
| Vulnerability assessment app for the security assessment process. | Video. | 4 | \$3,200 |
| 8521 | | 3 | \$1,613 |
| A SaaS platform enabling healthcare providers to better understand their potential patients' decision patterns, language and preferences. | Product data development, product experience development, UI design. | 3 | \$38 |
| A SaaS platform enabling healthcare providers to better understand their potential patients' decision patterns, language and preferences. | Product data development, product experience development, UI design. | 3 | \$1,575 |
| 8522 | | 2 | \$7,500 |
| Healthy eating challenges via mobile app to help users prevent the onset of diet-related disease. | Sales pipeline development. | 2 | \$2,500 |

| Company Description | Project Description | FTEs | Billed Support |
|---|---|------|----------------|
| Healthy eating challenges via mobile app to help users prevent the onset of diet-related disease. | Terms of Service, privacy policy, and parent consent form. | 2 | \$2,500 |
| Healthy eating challenges via mobile app to help users prevent the onset of diet-related disease. | Sales pipeline development. | 2 | \$2,500 |
| 8534 | | 2 | \$829 |
| New chemical entity to treat Metabolic Syndrome and Type II diabetes. | License agreement. | 2 | \$829 |
| 8556 | | 2 | \$2,333 |
| Web-based staffing platform for summer camps and prospective camp staff to find eachother. | Marketing analysis, strategy, plan, campaign design and launch. | 2 | \$2,333 |
| 8591 | | 1 | \$2,850 |
| Compliance training SAAS platform, primarily focused on safety and security issues, in particular, workplace violence ("WPV") prevention and active shooter preparedness. | LMS setup and customer support. | 1 | \$500 |
| Compliance training SAAS platform, primarily focused on safety and security issues, in particular, workplace violence ("WPV") prevention and active shooter preparedness. | Sales collateral development. | 1 | \$950 |
| Compliance training SAAS platform, primarily focused on safety and security issues, in particular, workplace violence ("WPV") prevention and active shooter preparedness. | Sales collateral development. | 1 | \$400 |
| Compliance training SAAS platform, primarily focused on safety and security issues, in particular, workplace violence ("WPV") prevention and active shooter preparedness. | LMS setup and customer support. | 1 | \$500 |
| Compliance training SAAS platform, primarily focused on safety and security issues, in particular, workplace violence ("WPV") prevention and active shooter preparedness. | LMS setup and customer support. | 1 | \$500 |
| 8601 | | 2 | \$2,450 |
| Web browser plug in allowing users and advertisers to express themselves on top of web content in a sharable manner. | Website and logo. | 2 | \$1,875 |
| Web browser plug in allowing users and advertisers to express themselves on top of web content in a sharable manner. | Website and logo. | 2 | \$575 |
| 8624 | | 1 | \$3,213 |
| Safe, low cost infant sleeping beds. | Utility patent application. | 1 | \$919 |
| Safe, low cost infant sleeping beds. | 3rd party testing. | 1 | \$2,294 |
| 8636 Y | | 2 | \$750 |
| Guided meditation and respiratory biofeedback app. | Corporate formation package. | 2 | \$450 |
| Guided meditation and respiratory biofeedback app. | Corporate formation package. | 2 | \$300 |
| 8657 U | | 1 | \$4,994 |
| Digital health predictive analytics company initially targeting critical care and emergency wards in hospitals of all sizes. | Financial modeling and investor document development. | 1 | \$3,385 |
| Digital health predictive analytics company initially targeting critical care and emergency wards in hospitals of all sizes. | Financial modeling and investor document development. | 1 | \$1,609 |
| 8761 | | 5.5 | \$9,695 |
| System that allows companies to understand network attack from the outside-in and discover new threats and assess their global impact. | Brand experience, visual language studies, rough wireframes, and high-fidelity visual comps for the marketing homepage. | 5.5 | \$9,695 |

| Company Description | Project Description | FTEs | Billed Support |
|--|--|------|----------------|
| 8771 | | 4 | \$6,500 |
| Photography marketplace to match freelance photographers with clients. | Customer acquisition strategy, market sizing. | 4 | \$3,000 |
| Photography marketplace to match freelance photographers with clients. | Logo, branding package. | 4 | \$3,500 |
| 8774 M | | 4 | \$4,000 |
| V2X software to make roads and vehicle-to-everything interactions safer. | Provide legal services regarding US entity setup, business registrations, and IP strategy. | 4 | \$4,000 |
| 8777 U | | 0.5 | \$3,000 |
| Low cost, research-based program designed to enrich people's lives and reduce psychological distress. | Market launch plan. | 0.5 | \$1,000 |
| Low cost, research-based program designed to enrich people's lives and reduce psychological distress. | Market launch plan. | 0.5 | \$2,000 |
| 8778 U | | 1 | \$1,450 |
| Portable oxygen concentration device. | Formation NDA creation term sheet | 1 | \$1,450 |
| 8793 M | | 2 | \$9,485 |
| A portable, 180° rear/side view vision system with no fish eye effect | Preparing tools for approaching Investors. | 2 | \$3,225 |
| A portable, 180° rear/side view vision system with no fish eye effect | Investor engagement. | 2 | \$2,525 |
| A portable, 180° rear/side view vision system with no fish eye effect | Preparing tools for approaching Investors. | 2 | \$775 |
| A portable, 180° rear/side view vision system with no fish eye effect | Investor engagement. | 2 | \$2,960 |
| 8794 | | 0.5 | \$3,200 |
| Software application that guides home buyers by making the transaction steps transparent to all parties. | SAFE financing. | 0.5 | \$1,230 |
| Software application that guides home buyers by making the transaction steps transparent to all parties. | Company formation package. | 0.5 | \$750 |
| Software application that guides home buyers by making the transaction steps transparent to all parties. | SAFE financing. | 0.5 | \$520 |
| Software application that guides home buyers by making the transaction steps transparent to all parties. | Contractor and equity agreements | 0.5 | \$500 |
| Software application that guides home buyers by making the transaction steps transparent to all parties. | Website photography. | 0.5 | \$200 |
| 8831 | | 1 | \$1,500 |
| Matching hunters with land and lodging to hunt wild game with sponsored hunting outfitters. | Corporate formation package, equity agreements. | 1 | \$750 |
| Matching hunters with land and lodging to hunt wild game with sponsored hunting outfitters. | Corporate formation package, equity agreements. | 1 | \$750 |
| 8832 | | 3 | \$1,502 |
| Accurate security breach detection tool with actionable information for IT teams to detect and respond to cyber security events. | Spinout new company formation. | 3 | \$383 |

| Company Description | Project Description | FTEs | Billed Support |
|--|--------------------------------|--------------|------------------|
| Accurate security breach detection tool with actionable information for IT teams to detect and respond to cyber security events. | Spinout new company formation. | 3 | \$1,120 |
| 8884 U | | 4 | \$750 |
| Interactive financial education suite of services. | Corporate formation. | 4 | \$750 |
| Total (49 Companies) | | 120.5 | \$170,328 |

SPARK Central Innovation Center

Ground Floor – *Pre-Seed Stage*

Incubator clients are charged a license fee per seat, or person(s) using the space. Exit dates may have passed as some clients have a month-to-month arrangement.

| Uniq ID | Company Description | Start Date | Exit Date | Seats | FTEs |
|-----------------------------|---|------------|-----------|-----------|-----------|
| 8364 | Programming language for Computer Numerical Control manufacturing. | 1/15/18 | 4/30/18 | 1 | 1.5 |
| 8635 | On demand service and platform that connects consumers with certified phone and tablet repair technician. | 9/1/17 | 3/31/18 | 1 | 3.5 |
| 7374 | Augmented reality app for immersive digital experiences based on children's books. | 2/1/15 | 1/31/17 | 1 | 3 |
| 6545 | Software platform applies predictive analytics to strategic decisions regarding IP management. | 8/1/15 | 1/31/17 | 1 | 2 |
| 8826 | Automated business intelligence (BI) tool providing real time alerts for data quality and reporting issues. | 2/1/18 | 7/16/18 | 1 | 1 |
| 2203 | Online clothing inventory management that allows targeted retailer interaction. | 9/1/17 | 8/31/18 | 6 | 10 |
| 8419 | Next generation freight marketplace focused on better user experience, lower freight costs and regulatory compliance. | 12/1/17 | 5/31/18 | 5 | 5 |
| 8050 | Employee engagement SaaS app. | 10/1/17 | 3/31/18 | 3 | 5.5 |
| 8631 | Productizing marketing growth tools. | 9/1/17 | 8/31/18 | 1 | 1 |
| 2028 | Book & videos teaching Chinese to English speaking children. | 7/15/17 | 1/14/18 | 1 | 4.5 |
| 7620 | Software and simple hardware to integrate, retrieve and update personal identity information. | 3/1/17 | 7/31/17 | 1 | 2 |
| 8209 | Crowd-gifting platform designed specifically for Latin Americans and their families. | 12/1/17 | 5/31/18 | 2 | 3 |
| 8797 | Off-the-shelf machine learning applications. | 1/10/18 | 2/28/18 | 2 | 9 |
| 8187 | Disintermediated, app and web based, entity-to-entity trading platform for transportation services. | 1/16/17 | 7/16/17 | 1 | 2 |
| 8603 | Runner acquisition platform for race organizers. | 8/14/17 | 2/14/18 | 1 | 2 |
| Total (15) Companies | | | | 28 | 55 |

Third Floor – *Seed Stage*

The third-floor incubator space is composed of a shared open office environment and two smaller offices complete with a kitchen, conference rooms, phone booths, and controlled entry. Due to the open layout of the space, clients are free to expand as needed while “seats” only correspond to their billed rate. This model is designed for a seed stage company building out their strategy, product, and team.

| Uniq ID | Company Description | Start Date | Exit Date | FTEs |
|----------------------------|---|------------|-----------|-----------|
| 8521 | A SaaS platform enabling healthcare providers to better understand their potential patients’ decision patterns, language and preferences. | 1/1/18 | 6/30/18 | 3 |
| 7336 | Supply chain software. | 11/16/15 | 11/15/16 | 8 |
| Total (2) Companies | | | | 11 |

Fourth Floor– *Growth Stage*

This 6000 square foot space is ideal for growth stage companies that are either grown in-house or moving to the area. At full capacity, this workspace will seat over 60 people.

| Uniq ID | Company Description | Start Date | Exit Date | Seats | FTEs |
|-----------------------------|---|------------|-----------|-----------|------------|
| 4803 | An intuitive integrated display that retrieves medical data. | 4/25/16 | 10/25/16 | 5 | 4 |
| 8035 | Software company combining VR and autonomous vehicles for commercial, industrial and military applications with precision payloads. | 5/15/16 | 11/16/16 | 1 | 4 |
| 8588 | Search fund, an investment vehicle to purchase a small business. | 8/1/17 | 1/31/18 | 1 | 1 |
| 8116 | Social media listening and analysis software utilizing machine learning. | 9/1/16 | 2/28/17 | 3 | 9 |
| 7341 | Conversational IVR platform that combines voice, mobile messaging, and location-based services. | 2/1/16 | 5/31/17 | 2 | 9 |
| 8050 | Employee engagement SaaS app. | 12/1/17 | 5/31/18 | 4 | 5.5 |
| 8206 | Personality testing insights for kids aged 7-13. | 9/16/16 | 1/31/18 | 2 | 4 |
| 6977 | Human capital management software optimizing hiring, evaluations, and workflows for education and healthcare. | 9/1/17 | 2/28/18 | 1 | 3 |
| 7748 | Proprietary Web-based reporting platform to build analytical, predictive reporting tools. | 1/11/16 | 3/31/18 | 1 | 47.5 |
| 6835 | Combustion cycle and injection technology. | 5/1/16 | 11/1/16 | 5 | 6 |
| 8007 | Bamboo composite materials. | 6/1/16 | 11/30/16 | 1 | 3 |
| 8359 | Device identification technology to help the digital display advertising more effectively target audiences. | 9/1/17 | 2/28/18 | 2 | 9 |
| 8806 | Turnkey passive home entry module. | 1/1/18 | 3/16/18 | 2 | 2 |
| 8527 | We're building the tools and software infrastructure at the center of autonomous vehicle development. | 10/1/17 | 3/31/18 | 2 | 30 |
| 8797 | Off-the-shelf machine learning applications. | 3/1/18 | 8/31/18 | 3 | 9 |
| Total (15) Companies | | | | 35 | 146 |

Virtual Clients – *Investigative Stage, Misc. Stage, Community Partners*

The Virtual Client program at SPARK Central is ideal for those who need for drop-in co-working space and amenities at an affordable rate, with month-to-month terms. Some examples are the earliest “investigative stage” founders looking to network and validate their concept, companies at a later stage of growth who want to remain plugged into the core of the entrepreneurial community, or community partners who leverage the location and flexibility this option allows.

| Uniq ID | Company Description | Start Date | Exit Date | FTEs |
|---------|--|------------|-----------|------|
| 8090 | Cell-based assays designed for drug screens for carcinoma drug R&D. | 2/9/17 | 11/30/17 | 3 |
| 4132 | A medical device for the field of histology that automates a process used in tissue diagnostics. | 8/1/16 | 2/28/18 | 8 |
| 8133 | Virtual private networking as a service. | 8/1/16 | 1/1/17 | 1 |
| 8060 | Renewable electric generation system for large trucks: converts the kinetic energy of a moving vehicle into electricity. | 7/1/16 | 1/31/18 | 6 |
| 1282 | Technologies for integrated & standardized assessments of blood damage/red blood cells. | 7/1/10 | 3/31/16 | 0 |
| 2203 | Online clothing inventory management that allows targeted retailer interaction. | 11/2/16 | 5/2/17 | 10 |
| 8769 | Automated legal document generation software. | 12/1/17 | 5/31/18 | 1 |
| 8519 | Provides manufacturing data analytics and related IT services to small and medium size manufacturing firms | 7/25/17 | 1/24/18 | 2 |
| 8793 | A portable, 180° rear/side view vision system with no fish eye effect | 12/15/17 | 5/15/18 | 2 |
| 8774 | V2X software to make roads and vehicle-to-everything interactions safer. | 1/15/18 | 7/16/18 | 4 |
| 7651 | Services to help students take action on their passions and interests. | 5/1/16 | 1/31/18 | 3 |
| 7046 | Electronics based metering and power line communication. | 4/1/14 | 1/1/16 | 1 |
| 8862 | Mobile learning platforms to help young people combat sexual violence and misconduct. | 3/1/18 | 8/31/18 | 2 |
| 2679 | Development of therapies for treatment of bone-related conditions in animals. | 6/15/15 | 6/30/16 | 0 |
| 8393 | B2B marketplace where businesses can easily find quality IT professionals. | 7/15/17 | 7/15/18 | 1 |
| 8206 | Personality testing insights for kids aged 7-13. | 2/1/18 | 7/31/18 | 4 |
| 9924 | Mobile imaging unit rental and brokerage. | 3/26/18 | 9/26/18 | 2 |
| 7153 | Brain imaging service for development of medications or devices for the central nervous system. | 7/1/14 | 6/30/17 | 1 |
| 7586 | Application to track and coordinate IVF procedures to assist patients. | 12/15/16 | 2/1/18 | 3.5 |
| 5557 | Digital marketing intelligence. | 7/1/12 | 6/30/16 | 4 |
| 8028 | Online platform for festivals, vendors, and attendees to share data and ideas. | 9/16/16 | 3/16/17 | 2 |
| 9936 | Disposable oxygenating technology that can be integrated into existing dressings/therapies. | 3/1/18 | 7/31/18 | 2 |

| | | | | |
|-----------------------------|---|----------|----------|------------|
| 4227 | Engineering services, including advanced FEA, CAD, and high-end design solutions. | 5/13/11 | 1/1/16 | 3.5 |
| 8609 | Quotation Lifecycle Management (QLM) applications focused on managing the interaction between our customer companies and their customers and suppliers. | 10/1/17 | 3/31/18 | 3 |
| 8228 | Medical software for secure storage and artificial intelligence driven retrieval of radiologic images. | 12/4/16 | 6/4/16 | 1 |
| 6600 | Medical device for vision enhancement in persons with partial loss of sight. | 6/1/13 | 12/31/16 | 2 |
| 8776 | Custom computing solutions for genomics applications. | 1/1/18 | 6/30/18 | 1 |
| 8645 | Personal protection modular system which will protect a person from pistol shots, knife attacks, and Tasers. | 10/1/17 | 3/31/18 | 2 |
| 7752 | SMB analytics and innovative mobile consumer/business interaction. | 11/2/15 | 4/30/16 | 3 |
| 7777 | SaaS enabled ride-sharing platform. | 5/1/16 | 10/31/16 | 14 |
| 8591 | Compliance training SAAS platform, primarily focused on safety and security issues, in particular, workplace violence ("WPV") prevention and active shooter preparedness. | 7/19/17 | 1/18/18 | 1 |
| 8323 | System for recording, displaying and interpreting human eye movements, and a method for recognizing emotional reactions to visual content. | 12/15/16 | 6/30/17 | 27 |
| 8543 | Novel video analytics capability for public safety and automotive companies to service their video analytics needs. | 7/1/17 | 3/8/18 | 2 |
| 7680 | Big data intelligence-as-a-service platform built for credit unions & community banks. | 1/26/17 | 7/26/17 | 3 |
| Total (34) Companies | | | | 125 |

Hosted Networking and Educational Events

This quarter's events are broken down by month in the following table. All events took place at the SPARK Central Innovation Center unless otherwise noted. In total, 888 people attended events.

| Event Name | Date | Approx. No. of Attendees | | Purpose of Event |
|---------------------------------------|---------|--------------------------|-------|---|
| | | Entrepreneurs | Total | |
| SPARK.ed taught by Michael Vath | 1/10/18 | 18 | 18 | This workshop is about building a development plan for your product taught by Michael Vath |
| R Meetup | 1/11/18 | 0 | 18 | A meetup for the R language. |
| Fintech Meetup | 1/17/18 | 0 | 25 | This is a group for anyone interested in learning and sharing about all things FinTech (Finance + Technology). All skills levels are welcome. |
| SPARK.ed taught by Ted Dacko | 1/17/18 | 25 | 25 | 20 Reasons Your Startup Isn't Getting Customers taught by Ted Dacko |
| A2 NewTech | 1/18/18 | 35 | 35 | The Ann Arbor New Tech meetup welcomes members from any school, sector, or industry function (e.g. entrepreneurs, technologists, investors, lawyers, marketers, students, bloggers, etc.) interested in local high-tech startups. |
| A2 NewTech | 1/18/18 | 50 | 50 | The Ann Arbor New Tech meetup welcomes members from any school, sector, or industry function (e.g. entrepreneurs, technologists, investors, lawyers, marketers, students, bloggers, etc.) interested in local high-tech startups. |
| Internship Workshop for Employers | 1/18/18 | | 17 | Whether you're starting from scratch or looking to bolster your current program, our hands-on workshop is designed to leave employers feeling confident in what it takes to start or enhance an internship program. |
| Netcapital Presentation / Event | 1/23/18 | | 32 | Join Ann Arbor SPARK and Netcapital for an evening of networking, a panel on Netcapital's funding platform, and pitches by three SPARK affiliated companies that are raising rounds on Netcapital. |
| SPARK.ed taught by Jayne Burch | 1/24/18 | 12 | 12 | This workshop is about - How to Turn Your Website into a Powerful Lead Generation Engine taught by Jayne Burch |
| SPARK Marketing team: Ask us Anything | 2/6/18 | 20 | 20 | This workshop gave a broad overview of who the SPARK marketing team is, what they do, and how they can help. |
| R Meetup | 2/8/18 | 0 | 14 | A meetup for the R Language group. |
| Tech Trek Planning Luncheon | 2/14/18 | | 35 | A planning luncheon for the companies who participated in Tech Trek 2017. |
| SPARK.ed taught by Ted Dacko | 2/14/18 | 14 | 14 | This course will cover the essentials of board management including types of boards, board dynamics, setting up a board, board communications and reporting, questions board members have, managing a board meeting and issues that can arise between and among board members, the CEO and the management team. |

| | | | | |
|---|---------|------------|------------|--|
| Fintech Meetup | 2/21/18 | 0 | 50 | This is a group for anyone interested in learning and sharing about all things FinTech (Finance + Technology). All skills levels are welcome |
| NLP Meetup | 2/28/18 | | 12 | Group for all Natural Language Processing (NLP) and machine learning researchers, students, practitioners and enthusiasts in the Ann Arbor and Detroit Areas who want to get together and discuss their interests and stay up-to-date on the latest developments in NLP. |
| Ann Arbor Mobility Transformation workshop | 3/1/18 | 0 | 18 | Information on the mobility industry and how it's transforming the world around us. |
| SCIC Client Lunch | 3/6/18 | 50 | 50 | A luncheon for the companies/tenants at SCIC. |
| SPARK.ed taught by Ted Dacko | 3/7/18 | 22 | 22 | This class will cover the basics of choosing and utilizing mentors to your best advantage. We will also discuss mentorship from the mentor point of view and cover topics like things mentors wish mentees knew. |
| R Meetup | 3/8/18 | 0 | 15 | A meetup for the R language group. |
| BioArbor | 3/14/18 | 0 | 60 | BioArbor, an entirely volunteer run organization, hosts educational networking events for the life sciences industry in the greater Ann Arbor area. BioArbor events explore technology commercialization (product, device, and service), financing strategies, business development, regulatory affairs, marketing, and other topics useful to life science entrepreneurs. |
| SPARK.ed taught by Kai Stubbel | 3/14/18 | 8 | 8 | This three-hour session will provide participants with tools to help recognize different types of conflict and resolve differences with and among others before small issues become unmanageable. |
| A2 NewTech | 3/20/18 | 50 | 50 | The Ann Arbor New Tech meetup welcomes members from any school, sector, or industry function (e.g. entrepreneurs, technologists, investors, lawyers, marketers, students, bloggers, etc.) interested in local high-tech startups. |
| Fintech Meetup | 3/21/18 | 0 | 15 | This is a group for anyone interested in learning and sharing about all things FinTech (Finance + Technology). All skills levels are welcome |
| Blue Ocean Strategy Fireside Chat | 3/30/18 | | 60 | A talk from world-renown author Renée Mauborgne on " <i>Blue Ocean Shift</i> ," the recently released <i>NY Times</i> and #1 <i>Wall Street Journal Bestseller</i> and follow-on to the global bestselling " <i>Blue Ocean Strategy</i> ". |
| Total (24 Events) | | 304 | 675 | |

Microloans

| | |
|---|--------------|
| Number of loans currently outstanding: | 14 |
| Current total loan amount outstanding | \$547,330.22 |
| Loan amounts repaid this fiscal year | \$81,183.44 |
| Loans written off this fiscal year | \$106,616.56 |
| Jobs retained | 97 |
| Jobs created | 12 |
| Current balance of the microloan account | \$91,205 |

Internship & Entrepreneur-In-Residence Programs

Entrepreneur-In-Residence Program

This quarter, three companies utilized the entrepreneur-in-residence program. This program is designed to attract and retain C-level individuals in the community by leveraging their talent and experience to add substantial value to client companies.

| Uniq ID | Company Description | Billed Support | FTEs |
|-----------------------------|--|-----------------|-----------|
| 7374 | Augmented reality app for immersive digital experiences based on children's books. | \$500 | 3 |
| 8422 | A new process to manufacture custom orthotic devices by connecting orthotists with 3D printing through the cloud. | \$8,788 | 1 |
| 7656 | Platform matching corporations and law firms with vendors who provide ancillary legal services. | \$6,000 | 2 |
| 6522 | Development and implementation of online negotiation systems for courts and constituents. | \$3,000 | 10 |
| 8774 | V2X software to make roads and vehicle-to-everything interactions safer. | \$16,000 | 4 |
| 8610 | Product to improve Inventory management, waste reduction, foam reduction, and precision carbonation control of draft beverages. | \$825 | 2 |
| 7704 | Computer vision-based phone or tablet-based application for construction workers' safety and ergonomics monitoring/analysis. | \$8,100 | 1 |
| 7816 | Application to detect, quantify, and in many cases automatically fix inefficiencies in large-scale, enterprise software systems. | \$4,000 | 1 |
| 7066 | Platform to accept and manage concussion-tracking data collected from helmet sensors. | \$13,000 | 0.5 |
| 8041 | Proprietary process for joining of dissimilar materials (aluminum-to-advanced high strength steel). | \$450 | 5 |
| 8384 | App and cloud service to connect dietitians and their clients for efficient, timely interaction. | \$1,950 | 2 |
| 8286 | Website built to match job seekers with startup jobs they are qualified for. | \$4,000 | 2.5 |
| Total (12) Companies | | \$66,613 | 34 |

Intern Program

The Ann Arbor SPARK internship program provides up to \$3000 of matching funds to a qualified, growing company to support a three-month intern. This frees up additional funds for other purposes and provides a de-risked way to try out a potential permanent addition to the team - an opportunity that is invaluable during the pivotal period of initial hires. Often the talent is retained at the company after the matched period ends. Special consideration is given to applicants who are considering moving to Ann Arbor from another tech hub or have skillsets in high demand. While originally conceived as a summer program, it continues to meet the needs of startups year-round.

| Uniq ID | Company Description | Billed Support | FTEs |
|----------------------------|---|----------------|----------|
| 8556 | Web-based staffing platform for summer camps and prospective camp staff to find eachother. | \$2,438 | 2 |
| 8591 | Compliance training SAAS platform, primarily focused on safety and security issues, in particular, workplace violence ("WPV") prevention and active shooter preparedness. | \$459 | 1 |
| Total (2) Companies | | \$2,897 | 3 |

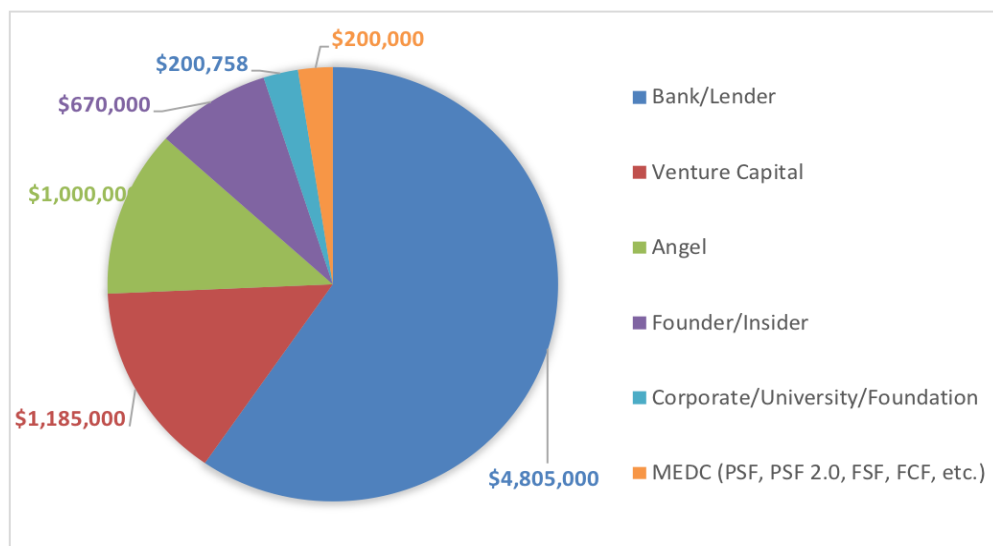
Digital Engagement Clinic

Client startups received a digital marketing boost through a collaborative program between Ann Arbor SPARK and Eastern Michigan University's Center for Digital Engagement (CDE). The Digital Engagement Clinic matched undergraduates and recent graduate interns with Ann Arbor SPARK clients to accelerate the startups' digital marketing efforts. The startups received hands-on digital marketing, and clinic interns received valuable work experience that built their resumes. The program kicked off mid-June and will run into mid-August. As of the writing of this report, 65% (15/23) of this past summer's clinic had found either full or part time jobs in the Southeast Michigan tech economy. Of the eight who did not, one is looking for full-time work. The other seven have continued as full-time students. We expect the percentage to climb over time.

Capital Raised

Capital transactions reported this quarter are more numerous than other quarters due to the inclusion of data captured by the annual survey. The following table lists transactions reported by companies previously served by LDFA funded programs:

| Uniq ID | Transaction Details, if Available | Amount |
|---------|---|--------------------|
| | Venture Capital | \$1,185,000 |
| 4471 | North Coast Technology and angels | \$185,000 |
| 4803 | Qualcomm Ventures | \$1,000,000 |
| | Angel | \$1,000,000 |
| 7143 | N MI angels, Colorado Angels | \$100,000 |
| 3010 | - | \$195,000 |
| 8050 | - | \$250,000 |
| 7362 | 3 angels plus MAF | \$185,000 |
| 4471 | 5 angels and MAF | \$120,000 |
| 1471 | - | \$250,000 |
| | Bank/Lender | \$4,805,000 |
| 1471 | Chase Bank | \$2,300,000 |
| 1471 | Chase Bank | \$2,000,000 |
| 1471 | Chase Bank | \$500,000 |
| 2028 | - | \$5,000 |
| | MEDC (PSF, PSF 2.0, FSF, FCF, etc.) | \$200,000 |
| 8050 | Invest Michigan | \$150,000 |
| 7143 | Invest Michigan | \$50,000 |
| | Founder/Insider | \$670,000 |
| 8050 | - | \$400,000 |
| 1286 | - | \$255,000 |
| 1796 | - | \$15,000 |
| | Corporate/University/Foundation | \$200,758 |
| 279 | Patient Organizations | \$200,758 |
| | Total (18 Transactions Reported) | \$8,160,758 |



Integrated Marketing Plan

Annual goals were met or exceeded demonstrating effective use of marketing tactics and budget to achieve substantive results as measured below:



| Metric | Actual | Goal | Percent | Rationale for Annual Goal |
|--|--------|--------|---------------|--|
| Average Newsletter Open Rate* | 21.1% | 20% | Above by 1.1% | Beat industry standard (18%) by 2%. *Not cumulative |
| Entrepreneurial Services Webpage Views | 46,933 | 59,211 | 79% | Increase Page Views to ES by 3,000 annually above 2013-2014 fiscal year. |
| Webpage Visits by Ann Arbor Residents | 31,679 | 74,072 | 43% | Increase visits to the website from Ann Arbor overall by 5,000 annually over 2013-2014 fiscal year. |
| Social Media Referrals | 1,522 | 4,297 | 35% | Increase visits from Ann Arbor to website from social media by 500 visits above 2013-2014 fiscal year. |
| Video Views | 3,886 | 5,506 | 70.6% | Increase video plays from Michigan by 500 annually above 2013-2014 fiscal year. |
| PR Views & Hits | 6,243 | 25,000 | 25% | Increased mentions of Ann Arbor startups in local, regional, and national news publications. |

Methodology

Initial Data Entry

A procedure was implemented in late 2008 requiring all entrepreneurs requesting assistance of Ann Arbor SPARK for Business Acceleration services, Incubator space or Boot Camp to fill out an online form which could be accessed through the SPARK website. Basic information including name, address, phone, email and brief description of company are required. This information is automatically fed into Salesforce. An effort is made to connect with all inquiries within 48 hours. In an initial communication, additional data gathered by SPARK personnel determines if the entrepreneur meets minimum criteria to warrant further discussion and assistance. At that time, a better description is captured of the applicant's needs.

Retained FTEs

We capture the number of FTEs that a company had at the start of an engagement of any kind. This number becomes our retained jobs number and is not altered. However, for reporting purposes it is possible the retained jobs number can change for a company if that company takes advantage of multiple services and their FTE count changes between those services. For example, when a team attends Boot Camp there may be only one FTE: the entrepreneur. When that team returns for Business Accelerator services there may be additional FTEs: co-founders or initial hires. When reports are generated on Boot Camp attendees the team's retained FTE number would be one. When reporting on Business Accelerator clients, the retained FTEs would be more than one.

Current FTEs

Throughout the year 'current jobs' is collected from entrepreneurs through three methods. When SPARK staff meet with entrepreneurs FTE updates are gathered and recorded in the CRM system. Starting midway through this contract year, written documentation is being obtained from every company at the start of each engagement. This document is attached to their file to corroborate the FTE count listed as start of engagement.

Annual Survey

All current and former clients are surveyed annually using Clicktools: an online survey tool that synchronizes with Salesforce. Our survey asks for data including current employment and other vital company information. Unfortunately, the response to our surveys has been less than 100%. The response rates for each of the four areas are listed in each section. If an entrepreneur sends SPARK data via the survey that does not pass a visual inspection they are contacted and asked to verify the data. If an adjustment is made to the CRM data, written documentation from the entrepreneur is attached to the file.

Jobs Created

New FTEs or "Jobs Created" are calculated by subtracting the retained jobs for the particular service we provided from the current job count, which gives us the added jobs since that particular engagement started.

Software

During this quarter, the software line in our budget was used in the following ways:

1. **Zendesk:** \$300 – Annual subscription. Customer experience tool to help manage the incubators.
2. **DocuSign:** \$480 – Annual subscription. Document execution and management platform.

Glossary

In an effort to reduce unnecessary complication, SPARK and the LDFA keep definitions of terms consistent with MEDC. Included for reference are applicable definitions provided by the MEDC:

Companies Served

The number of tech companies that contractor provided services to, including accelerator grants, incubator space, mentoring, consulting, training, etc.

Full-Time Equivalent

All W-2 employees and full-time workers compensated in equity. All part-time employees count as 0.5 FTE. Interns and independent contractors (1099) are not included in this definition.

Jobs Created

Number of jobs created by the companies that contractor served or are incubator clients. Does not include contract positions, only full-time equivalents.

Jobs Retained

Number of jobs retained by the companies that contractor served or are incubator clients. Does not include contract positions. Basically, includes the number of positions or employees at the companies that have been retained because of the funding from the incubator or because of the services that the incubator provided.

New Companies Created

Number of new companies created as a result of contractor's involvement. Companies can be defined as sole proprietorship, LLC, Corp, etc. Involvement can mean: 1) contractor provided services or funding to the company, 2) the company is located in contractor's incubator, 3) the company is a university spin-out, 4) contractor spoke with the newly formed company and provided them help with the next steps in building his/her company for example other resources, training classes, etc., or 5) contractor spoke with the CEO/CTO prior to the company formation. A company is only counted as 'new' if it is incorporated within the subsequent 12 months of the service provided.

Tech Company

A business in which research and development brings forth an innovative product or process. The innovation typically involves intellectual property that contributes to a strong competitive advantage in the marketplace and serves as a foundation for a high rate of growth.