The Pipeline

DARPA & INQTEL

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Executive Summary

Before beginning an analysis on the market, it's important to build a perspective on the market and the prerequisite knowledge necessary to understand that perspective. Economies are complex, self-organising systems with emergent properties and, in the modern world, are rarely free. Adam Smith's invisible hand is not the only hand and it is not the only one obscured by jargon and specific domain knowledge.

In the trading of publicly traded equity or debt instruments over the last decade, an understanding of the Federal Reserve and its strategies has likely been a stronger factor in portfolio performance than specific company knowledge. One of the more talked-about and successful algorithms during their Quantitative Easing was not an algorithm which analyzed stocks, but one which analyzed Federal Reserve Chair Ben Bernanke's face as he walked up to the podium before announcements.

In the trading of commodities over the last decade, an understanding of OPEC (Organization of the Petroleum Exporting Countries) and post-Cold War geopolitik would have been a stronger factor in portfolio performance than reading data about demand in India and growth of renewables in the United States. Understanding the relationships between the United States and Saudi Arabia, between Saudi Arabia and the other OPEC nations, the failure of Western sanctions on Russia and the creditworthiness of the Russian Government being closely linked to the world price of oil might have built a perspective that would have protected a portfolio from volatility in the market.

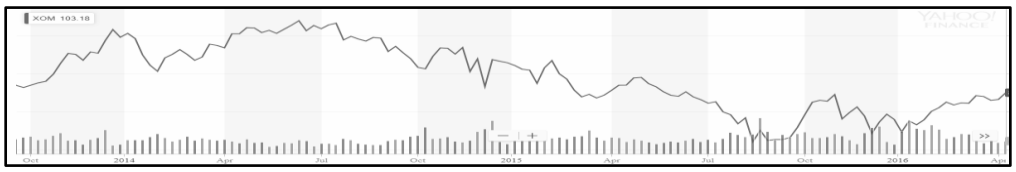


Figure 1: Exxon (XOM) Price During Oil Instability

The economy with which Americans interact is not a command economy, but it is also not an explicitly free market. The public equity and debt markets are *adjusted* by the Federal Reserve and cliques of consolidated capital investment organisations. The Gold Market is *adjusted* by the LBMA (London Bullion Management Association). Energy Markets are *adjusted* by governments and their geopolitical interests. Whether or not people notice is of no consequence, **large market sectors are very rarely *exclusively* beholden to the laws of organic supply and demand**. The market of interest in this document is found within the American Tech Sector and in the interest of developing a perspective on this market, the organisations which *adjust* the market and, more importantly, graft new companies into it, will be detailed.

DARPA

DARPA is the Defense Advanced Research Projects Agency. They are the primary governmental agency for research and development for the U.S. Military and Intelligence Service.

Founding

When the Soviet Union deployed the Sputnik satellite, then Senate Majority Leader Lyndon B. Johnson noted that it was a profound shock to realise that another country might be able to achieve technological superiority over the United States. He was not alone in this feeling. This profound shock, which was shared

in the Pentagon, the White House, and in the public, led to the founding of DARPA. Its mission was to accelerate scientific research and the development of new technology for military and governmental use. It would officially receive the name "DARPA" in 1972, but it existed beforehand under the name ARPA. For the purposes of this report, at all stages of its development, it will be referred to as DARPA.

Early Projects

oN-Line System

In the 1960's, DARPA funded research generalised as an attempt to develop a "comprehensive framework to augment human intellect". The project was managed by Douglas Engelbart and was called "oN-Line System" or NLS. This project was demoed at the Joint Computer Conference in San Francisco and introduced video conferencing, packet transmission through telephone lines, computer-video presentation, the mouse for user-GUI engagement and screen windowing. They found that, despite consistent packet transmission on small networks, it would be impractical for any larger group of participants attempting to exchange information.

DARPA wanted something, they researched internally, they collaborated with public institutions, then they passed it off to the public to develop it at scale.

ARPANET

In 1973, Robert Khan, a DARPA Program manager, collaborated with Vinton Cerf of Stanford University. DARPA wanted to develop protocols for consistent packet Transmission across an interwoven network of participants. Together they developed a protocol called Transmission Control Protocol and the Internet Protocol (TCP/IP).

DARPA wanted something, they researched it internally, they offered research grants, then they passed it off to the public to develop it at scale.

The DARPA to Public Pipeline

DARPA developed a method to its madness over the time between its origin and the late 1990's. A good preface to this might be analyzing the answer to the question: Why did DARPA spend so much of its budget on ballistics research but did not manufacture or design the Main Battle Rifle of the U.S. Military? The answer is simple:

DARPA is aware of inherent bureaucratic inefficiency in the U.S. Government and that it does not have the money, incentives or resources to consistently manage product cycles. What it does have is a budget and the absence of concern for profit on its research. This means that DARPA can spend money on projects like:

- Using flies to coordinate air support
- Weaponising bees
- Testing the use of octopus tissue for camouflage
- Creating remote-control devices for live rats
- Building a mechanical elephant to transport equipment in Vietnam

They can work on and fund the research for years and then not use it for decades if they'd like, because the intent isn't to produce revenue, it is to produce technology and research. DARPA can take bigger risks on projects than the representative government can, as they're not held accountable to constituents. DARPA is flexible, it can fund things like brainstorming or partial solutions across more than one solicitation. It can fund purchase orders for products that don't exist yet and allow grantees to retain proprietary rights after obligations are complete. Finally, DARPA can defund, increase, or extend funding at any time without having to ask for permission, allowing projects to quickly

have escalations in funding in the case of success or defunding when projects stagnate.

Until the 1990's, the DARPA Pipeline functioned as follows:

- The U.S. Military, Intelligence Service, or a Federal Agency has some want or need, or DARPA predicts they will have some want or need in the future
- DARPA begins to research and analyze the want or need internally
- DARPA releases research grants and initiatives to the public
- DARPA analyzes the results and either shelves it, releases new grants, or releases the results to the public
- The Public takes the risk on developing potential solutions to the want or need without the risk in initial research and with the knowledge that the solutions are actually in demand.
- DARPA implements solutions and re-enters discovery

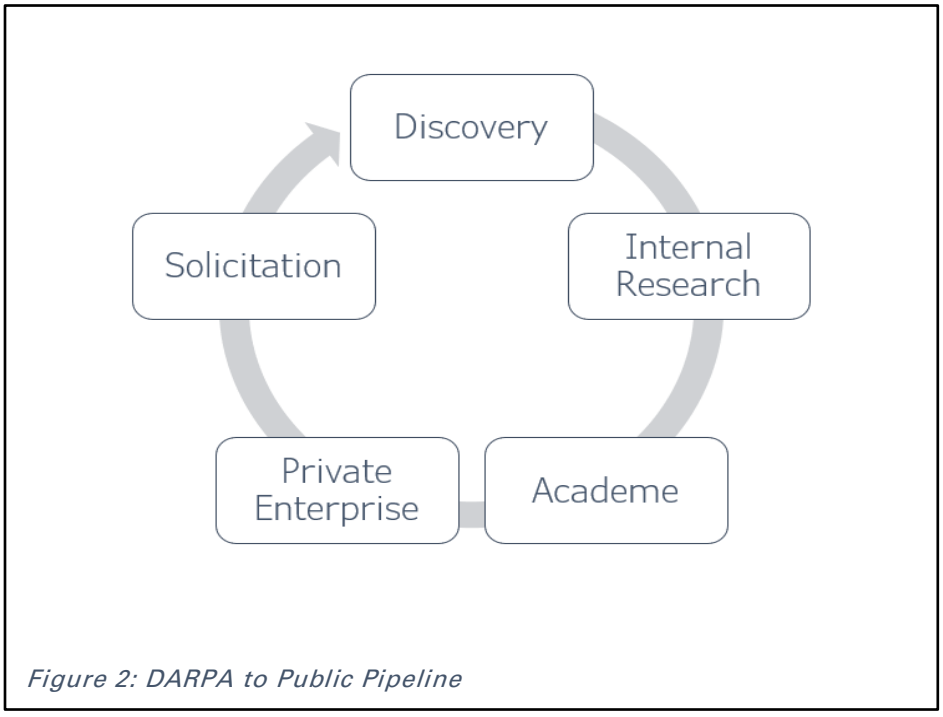


Figure 2: DARPA to Public Pipeline

DARPA didn't just develop a strategy, they helped refine a new economic technology, a stitching together of Government, Private Enterprise, and Academe. Consider a scenario where some disease mutates and begins to spread through a small locale in rural Africa. There is some potential that it could spread further but there is low risk of global contagion. However, if there was global contagion, even without further mutation, it would be demonstrably catastrophic.

Pharmaceutical companies in the U.S. cannot afford to spend tens of millions of dollars developing a drug that has no market validation. If it spreads, they'll profit proportionate to their risk, but the likelihood of contagion is so low that no reasonable company with the resources to handle such a problem would find any reasonable incentive in doing so. However, a government agency could get a budget and take the risk on research because there is no profit incentive; they can do the research internally and then use the budget to provide grants to universities and companies to aggregate more research. Yet, if the disease became a pandemic, the agency would be unable to manufacture drugs at scale; instead, it can pass all of its research back to companies to produce the drugs. This allows profit incentive to do what it does best: create competition to reduce manufacture time, complexity and cost.

What is described in this scenario is the CDC (Center for Disease Control) and its handling of Ebola. The CDC used this same economic technology to effectively wipe out Malaria in the Continental United States. This economic technology can be defined as an integration of, or the creation of a pipeline between, three systems. One is operating in what is referred to as an immediate reward environment (Enterprise), the next is operating in a delayed reward environment (Government), and the last is in a hybrid environment (Academe).

Introduction to IN-Q-TEL

In 1979, DARPA started working with MIT on a concept called “movie maps”. Movie maps allowed users to take virtual, free-roaming tours through cities or buildings. DARPA was interested because allowing Special Operations personnel to view terrain from the ground before being on the ground would be an inarguable boon to operations in the future. They sat on this technology for decades, slowly drip-feeding grants and research requests to the public. DARPA wanted to see terrain on the ground in a quasi-3d environment, go inside selected buildings, and view time-lapses of terrain and urban areas.

In the early 2000’s a company named Keyhole begins to grow. Building on technology that provides an imaging service that is nearly in line with all of DARPA’s wants. In 2003 a fairly quiet company called IN-Q-TEL, a venture capital firm which opened in 1999, invests in Keyhole a month before Operation Iraqi Freedom. Within two weeks of the strategic investment in Keyhole, the technology was being implemented in the Pentagon and plans were made to put it in use during Iraqi Freedom. IN-Q-TEL secured strategic partnerships, assistance, and additional funding for keyhole and by the end of 2004, they were purchased by Google and their product became Google Earth. Keyhole was so tailored to government needs and so well developed that in 2010, a contract award, HM157210R0010, is given on a no-bid basis because Google meets geo-mapping needs so completely that the government has no choice but to use them and ignore consideration for other potential providers (IBM, Microsoft).

The New Pipeline

DARPA built the first autonomous vehicle in 1984 and the Pipeline failed to bring anything to market as it required an enormous amount of cooperation and funding. As time went on, DARPA and Partner Agencies realised that the products they needed were becoming more complex, and that the requirements of bringing product cycles to a close had evolved to include partnerships between many organisations.

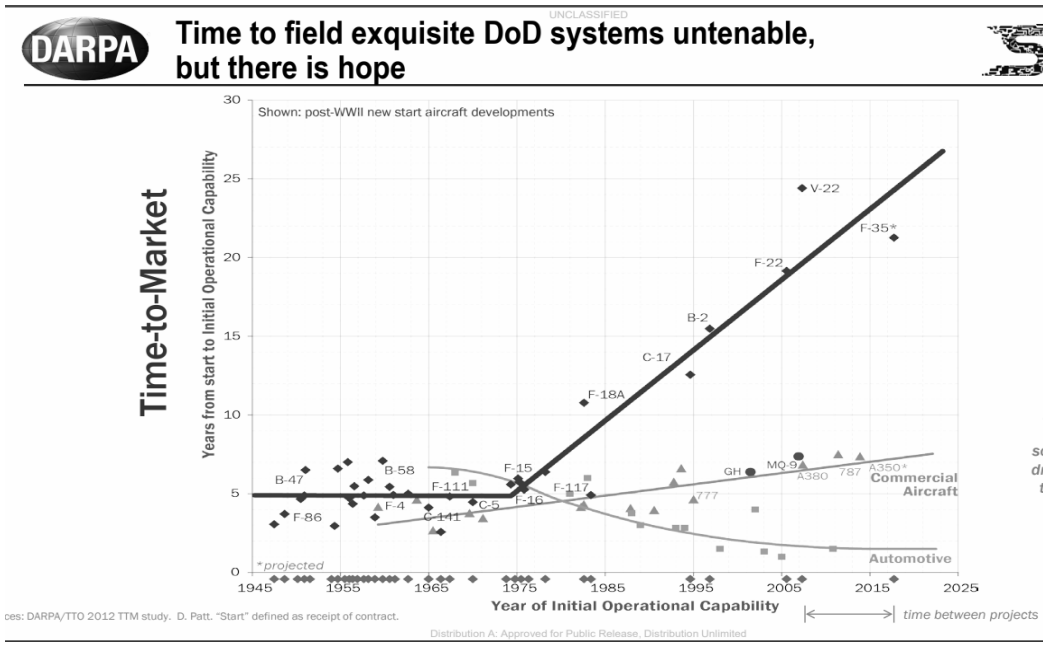


Figure 3: DARPA to Public Pipeline

As a result of this realisation, it would seem that they added a new link in the Pipeline, a private venture capital firm: IN-Q-TEL, the self-described investment wing of CIA.

Case 1: Conversational AI (MindMeld)

DARPA wants conversational AI, they release grants and research initiatives, a company called MindMeld starts working with the

concept, IN-Q-TEL builds strategic partnerships and provides capital, CISCO buys MindMeld.

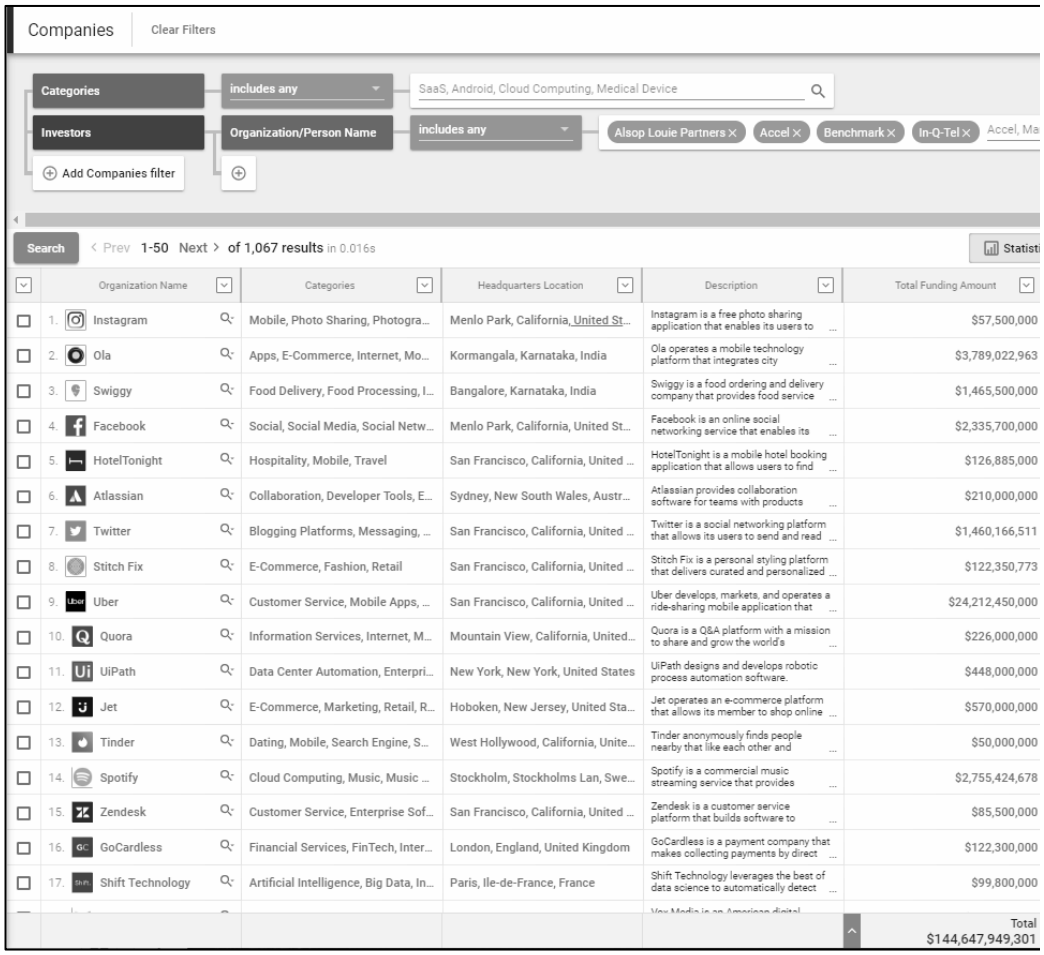
Case 2: Data Storage (Cleversafe)

DARPA wants safe data storage, a company called Cleversafe makes it, IN-Q-TEL builds strategic partnerships and provides capital, IBM buys Cleversafe.

Venture Capital Partners: Accel, Alsop Louie and Benchmark

Over the years, IN-Q-TEL's board has made close partnerships with other venture capital companies. Gilman Louie, the founder of IN-Q-TEL, has his own VC firm: Alsop and Louie, and, after serving as a fellow board member with James Breyer from Accel, built a relationship between the companies. IN-Q-TEL has also built a strong relationship with Benchmark from its position as a strategic consultant on their portfolio choices.

While IN-Q-TEL has relationships with many companies in the tech space, VC and otherwise, Benchmark and Accel are arguably the most important to consider. The sum total of funding given to companies who were invested in, for any amount, by one or more of these mentioned companies, amounts to 144 billion dollars. They are some of the most successful and disruptive companies in the United States, including MongoDB, Uber, Etsy, Spotify, Twitter, Tinder, Quora, Grubhub, Docker, Glassdoor, Discord, Twitch, Elastic, Fiverr, Upwork, Venmo, Facebook, Snapchat, Instagram and others. This isn't to say that all of these companies are of interest to DARPA or related agencies, but it's important to note the level of influence that this small clique of VC firms has on the market.



Companies | Clear Filters

Categories | includes any | SaaS, Android, Cloud Computing, Medical Device

Investors | Organization/Person Name | includes any | Alsop Louie Partners × | Accel × | Benchmark × | In-Q-Tel × | Accel, Ma

Add Companies filter

Search | Prev 1-50 Next | of 1,067 results in 0.016s | Statisti

	Organization Name	Categories	Headquarters Location	Description	Total Funding Amount
1.	Instagram	Mobile, Photo Sharing, Photogra...	Menlo Park, California, United St...	Instagram is a free photo sharing application that enables its users to ...	$57,500,000
2.	Ola	Apps, E-Commerce, Internet, Mo...	Kormangala, Karnataka, India	Ola operates a mobile technology platform that integrates city ...	$3,789,022,963
3.	Swiggy	Food Delivery, Food Processing, I...	Bangalore, Karnataka, India	Swiggy is a food ordering and delivery company that provides food service ...	$1,465,500,000
4.	Facebook	Social, Social Media, Social Netw...	Menlo Park, California, United St...	Facebook is an online social networking service that enables its ...	$2,335,700,000
5.	HotelTonight	Hospitality, Mobile, Travel	San Francisco, California, United ...	HotelTonight is a mobile hotel booking application that allows users to find ...	$126,885,000
6.	Atlassian	Collaboration, Developer Tools, E...	Sydney, New South Wales, Austr...	Atlassian provides collaboration software for teams with products ...	$210,000,000
7.	Twitter	Blogging Platforms, Messaging, ...	San Francisco, California, United ...	Twitter is a social networking platform that allows its users to send and read ...	$1,460,166,511
8.	Stitch Fix	E-Commerce, Fashion, Retail	San Francisco, California, United ...	Stitch Fix is a personal styling platform that delivers curated and personalized ...	$122,350,773
9.	Uber	Customer Service, Mobile Apps, ...	San Francisco, California, United ...	Uber develops, markets, and operates a ride-sharing mobile application that ...	$24,212,450,000
10.	Quora	Information Services, Internet, M...	Mountain View, California, United...	Quora is a Q&A platform with a mission to share and grow the world's ...	$226,000,000
11.	UiPath	Data Center Automation, Enterpri...	New York, New York, United States	UiPath designs and develops robotic process automation software.	$448,000,000
12.	Jet	E-Commerce, Marketing, Retail, R...	Hoboken, New Jersey, United Sta...	Jet operates an e-commerce platform that allows its member to shop online ...	$570,000,000
13.	Tinder	Dating, Mobile, Search Engine, S...	West Hollywood, California, Unite...	Tinder anonymously finds people nearby that like each other and ...	$50,000,000
14.	Spotify	Cloud Computing, Music, Music ...	Stockholm, Stockholms Lan, Swe...	Spotify is a commercial music streaming service that provides ...	$2,755,424,678
15.	Zendesk	Customer Service, Enterprise Sof...	San Francisco, California, United ...	Zendesk is a customer service platform that builds software to ...	$85,500,000
16.	GoCardless	Financial Services, FinTech, Inter...	London, England, United Kingdom	GoCardless is a payment company that makes collecting payments by direct ...	$122,300,000
17.	Shift Technology	Artificial Intelligence, Big Data, In...	Paris, Ile-de-France, France	Shift Technology leverages the best of data science to automatically detect ...	$99,800,000
					Total $144,647,949,301

Figure 2 - Companies Invested in by Noted VC Firms

Case 3: Civilian Behaviour Data (Facebook)

DARPA wanted to harvest data from civilians with the interest of spotting potentially threatening or suspicious behaviour. They researched this privately for some time and eventually, after collaboration with universities, the project became known as LIFELOG. The idea was to harvest the data by providing some benefit to civilians for compulsively recording their daily lives. The project was shuttered in 2004. Accel gives Facebook 12.7 million dollars in Series A funding later that year. This is not to say that the Government made Facebook, as some conspiracy

theories would suggest, that is certainly not the case. However, there was inarguable interest on part of the Government to make use of the data that Facebook had the potential to aggregate and the Government has since acted on that interest after Facebook's initial rise in popularity.

Case 4: Assistant AI (SIRI)

DARPA wanted a cognitive assistant that could assist with scheduling as well as save and retrieve information for users via voice commands. They researched this privately for some time and eventually, after collaboration with universities, the project became known as CALO. Apple bought the result of this research and renamed it SIRI.

Case 5: Facial Recognition Data (Snapchat, Instagram)

DARPA is not alone anymore, more specialised agencies have begun to form around them, mimicking their structure and mission. IARPA is the "Intelligence Advanced Research Projects Activity", which is a sister organisation of DARPA, formed in 2006, specifically targeting the Intelligence Community.

DARPA and its sister organisation, IARPA, needed next-generation Facial Recognition for a wide variety of reasons. They researched this privately for some time and eventually, after collaboration with universities, the project became known as JANUS after the Roman God Janus, who is usually depicted as having many faces. DARPA and IARPA could not get next generation Facial Recognition until it was able to get enormous amounts of "well posed, frontal-facing photos in multiple positions with multiple expressions with highly precise metadata" so that it could move beyond 2-dimensional image matching and move into model-based matching that can fuse together whatever video or stills are available. They worked on this project for some time.

Snapchat Filters encourage users take numerous frontal-facing stills and video with specific expressions. Benchmark gave

Snapchat their Series A funding of 13.5 million, Instagram Series A funding for 7 million and Series B for 50 million. Again, as in the case of Facebook, this is not to suggest that the Government **made** Snapchat, but they had inarguable interest in the data that could be aggregated by it and has since acted on that interest.

Case 6: Precision GPS (Pokémon Go)

DARPA made announcements in 2015 that they had prioritised development of real-time GPS position tracking and that they wanted to be able to do this from compact devices. A Computerworld article unsatirically mentioned that the advances wouldn't come anytime soon, as DARPA projects sometimes take decades to become actual products. Within a year, Gilman Louie is added to the board of a, then obscure, company called Niantic for his strategic insight. Niantic then releases Pokémon Go, a beloved and addictive "free" game which provided research into highly precise location tracking from a compact device. Interesting to note, Keyhole helped provide their Augmented Reality Software.

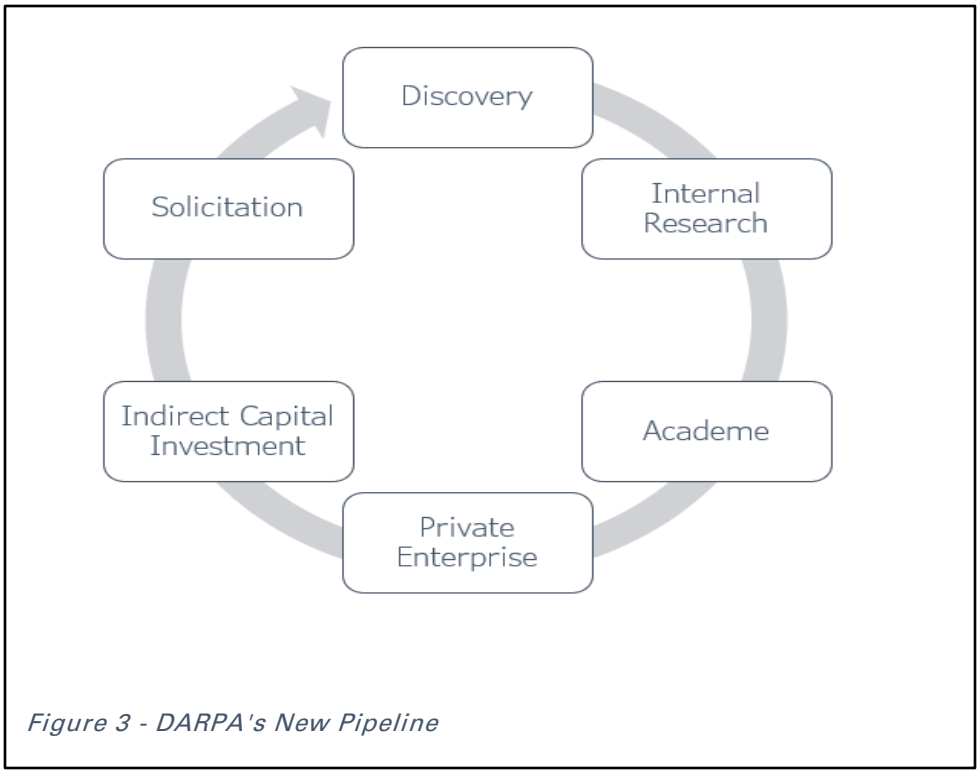


Figure 3 - DARPA's New Pipeline

Making use of the Pipeline

A Broad Agency Announcement is generally the first practical step in getting a research initiative off the ground. It is released to the public via word-of-mouth and private newsletters. It contains information that is material to the initiative, mostly directed towards researchers. Most of it is detailing how to contact the project managers, how to submit, what to submit etc. The relevant parts of this document and related information will be addressed below.

The First Link: Broad Agency Announcements

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Finding the BAA

Finding BAAs can be quite difficult at times as the agencies which release them tend to mirror the strategy of embassy personnel when they leave an area (burn everything). It's not uncommon for them to delete staff pages, the BAA links, project information links and white papers. It's not uncommon to find GitHub repositories related to the work with nothing left but empty folders.

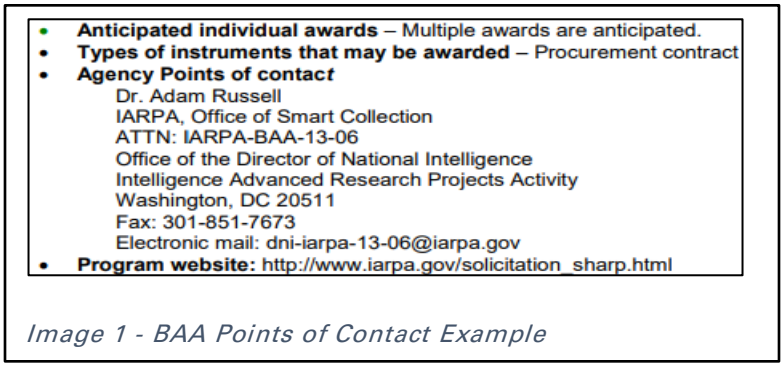
- **Anticipated individual awards** – Multiple awards are anticipated.
- **Types of instruments that may be awarded** – Procurement contract
- **Agency Points of contact**
  Dr. Adam Russell
  IARPA, Office of Smart Collection
  ATTN: IARPA-BAA-13-06
  Office of the Director of National Intelligence
  Intelligence Advanced Research Projects Activity
  Washington, DC 20511
  Fax: 301-851-7673
  Electronic mail: dni-iarpa-13-06@iarpa.gov
- **Program website:** http://www.iarpa.gov/solicitation_sharp.html

Image 1 - BAA Points of Contact Example

If the Solicitation number is found (examples found below), it can be plugged into FBO (fed-biz-opps, or federal business opportunities), a website where the government posts contract and research solicitations. Anything from mowing lawns outside government buildings to postings for full-time positions at Homeland Security can be found on the site.

Terrace Balustrade Restoration; Supreme Court of the United States RFPSCA190035 Z -- Maintenance, repair, and alteration of real property	Architect of the Capitol AOC Acquisition & Material Management Division Acquisition and Material Management Division	Solicitation	Apr 12, 2019
TMFJB Elevator Controller Upgrades and Replacements RFPSCA190029 Y -- Construction of structures and facilities	Architect of the Capitol AOC Acquisition & Material Management Division Acquisition and Material Management Division	Solicitation (Modified)	Apr 03, 2019
Construction Services for the Refrigeration Plant Revitalization (RPR) Phase IV RFPPPA190087 38 -- Construction, mining, excavating & highway maintenance equipment	Architect of the Capitol AOC Acquisition & Material Management Division Acquisition and Material Management Division	Combined Synopsis/Solicitation	Apr 02, 2019
Congressional Legislative Call System RFP190008 D -- Information technology services, including telecommunications services	Architect of the Capitol AOC Acquisition & Material Management Division Acquisition and Material Management Division	Combined Synopsis/Solicitation	Mar 26, 2019
Request for Information (RFI) - The Architect of The Capitol (AOC) Has a Requirement for Replacement of Outdated Assistive Listening Device (ALD) System In The Capitol Visitor Center (CVC), Washington, D.C. RFI-01VO19001 59 -- Electrical and electronic equipment components	Architect of the Capitol AOC Acquisition & Material Management Division Acquisition and Material Management Division	Sources Sought	Mar 08, 2019

Image 2 – FBO Results

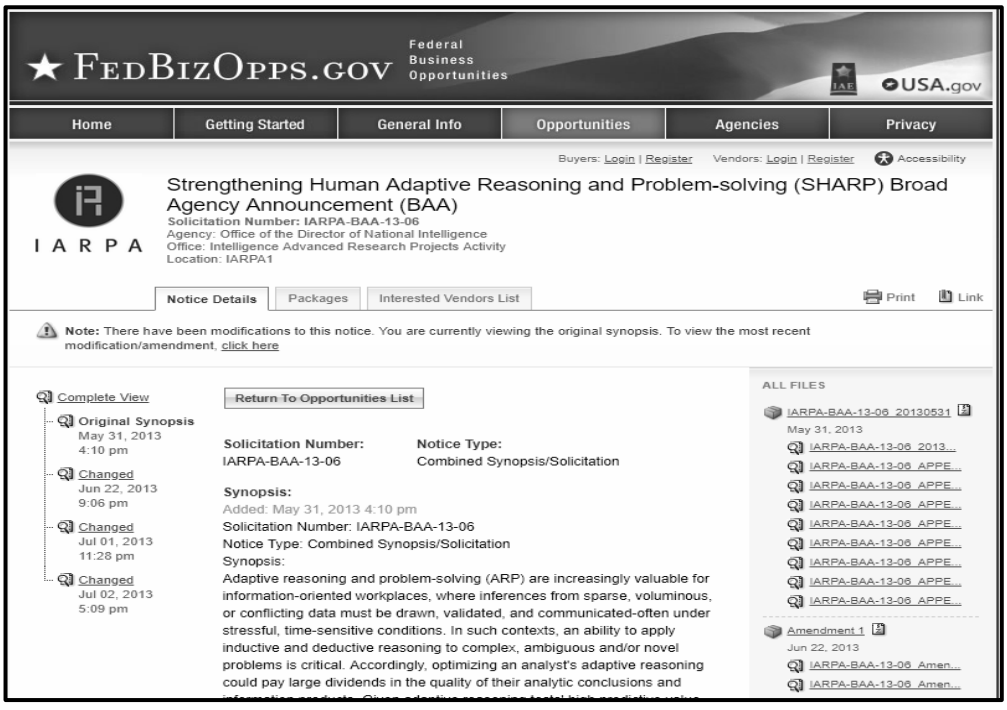

Image 3 – BAA Posting Example

A BAA can usually be found on FBO, it is rare that anything is taken down once it ends up in this database but finding it on the site's archives may not be easy.

Funding Opportunity Description

The BAA will generally have an area labeled "Funding Opportunity Description". This is a highly detailed breakdown of what's needed and why, as well as what they're explicitly not interested in. It will usually introduce the interests of the initiative, challenges to the pursuit of those interests, and cover potential avenues they're interested in using to answer those challenges. They will occasionally hide their real interests in the challenges, as they can often be pain points from previous BAA responses.

Technical Areas (TAs)

BAAs will often detail TAs, or "Technical Areas". This helps the BAA differentiate parts of the project. Many initiatives require multiple areas of expertise. For a deep-learning initiative on social media, perhaps it may include a TA for data storage, a TA for natural language processing, and a TA for data visualisation. They may be ordered by importance or sometimes chronologically, as some projects require one piece to be finished before moving on to the next. TAs may also be specific to the project rather than generalised within an academic field.

Finding Results

Results of BAAs can sometimes be fragmented and difficult to find because not all research is published or made publicly available. However, published research will likely use the BAA solicitation number as a reference or it will list the related grant in its meta-data. Google Scholar is enormously helpful in the search for public research. One may place the solicitation number in article search and it will pull all the papers that mentioned the BAA. If this returns no results, SBIRSource can be useful, although it is paywalled. To circumvent the paywall, a

researcher may enter private/incognito mode on the browser, search Google for SBIRSource and the project manager's name. If they acted as a point of contact on the site for the research solicitation it should bring up a profile page with links. However, failure to browse in private or incognito mode or simply going to the site and searching for project managers directly will result in the researcher being presented with the paywall after attempting to follow links on the site.

Discovering Agency Wide Interest

By reading many initiatives and Broad Agency Announcements, actors may discover underlying patterns that provide more useful, actionable intelligence than BAAs would on their own. This is especially true in the case that you find that the pipeline wasn't performant. If there are multiple BAAs that are in the same domain or have similar infrastructure needs, look to see if future BAAs address those infrastructure needs as direct interests or if the BAAs all seem to hover around similar problems. Look to see if there are companies in Accel, Benchmark, or IN-Q-TEL portfolios that address those problems.

It may be helpful to note that the government tends to see bureaucratic bloat around problems they can't solve. New agencies or departments will be opened, or quasi-identical initiatives will suddenly be found across multiple agencies as the can is kicked down the road. Often, the problem isn't that the problems in focus are unsolvable, it's just that the department and the collaborators are in a rut. This isn't to disparage them, the project managers are often some of the most intelligent, and proportionately credentialed, individuals in their respective fields. DARPA tries very hard to avoid these ruts, which is why the program managers generally offer many avenues towards solutions to prevent hyper-similar proposals.

Broad Agency Announcements are parts, or "simples", of a complex whole. To analyze them meaningfully, it is a requirement that the actor views them in terms of a greater narrative. This narrative is best defined by the discovery of

granular, underlying problems or problems-in-focus across many BAAs and attempting to form connections between the work of individual project managers.

Conclusion and Discussion

Using the pipeline is not necessarily a straightforward task, but, depending on the nature of the business in focus, it can be achieved. It should be noted that ensuring that the business, its culture, and its objectives are aligned with agency or government-wide interests, is likely a beneficial strategy regardless of access to the pipeline.

Furthermore, not all of the companies invested in by Accel and Benchmark are directly aligned with DARPA's interests, but many of them are. Understanding the Pipeline and its current objectives allows knowledgeable actors to take advantage of its predictability. If a company can align its interests with DARPA before or after its founding and show trajectory, there is a reasonable chance of getting their attention. This isn't some attempt to trick them, it's exactly what they want companies to do. They make an active attempt to make the private sector aware of what it is they're looking for, and they do so through grant offerings, product/service solicitations, announcement of initiatives, and broad agency announcements (BAA).

Trying to use the Pipeline does not necessarily have to be motivated by an interest in IN-Q-TEL partnership and IQT partnership at the end of the Pipeline does not necessarily have to mean working directly with the U.S. Military or Government. It's a stamp of approval that allows a company access to resources and partnerships, with governmental organisation and otherwise, and shows that that the company is holding something valuable. There are also former DARPA employees distributed throughout big companies and former employees of big companies scattered throughout DARPA. For example, Dan

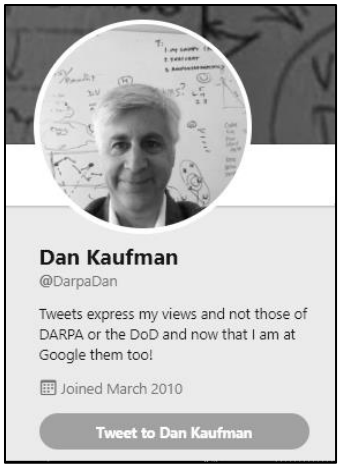

Image 4 - DARPA Dan

Kaufman, who was recently the director of Information Innovation at DARPA, is now Google's Head of Advanced Technology and Products. He's affectionately referred to by Google's staff as "DARPA Dan". Dan Kaufman is an excellent example of how the connection between industry and DARPA is not covert or secretive. In fact, it's openly talked about, just not in most civilian circles.

It may be helpful to read reviews of partnership with IN-Q-TEL (IQT).

Views on IN-Q-TEL Partnership

"IQT has played an instrumental role in many of our investments. It delivers a distinct and valuable combination of purpose, strategy, and technical insight that delivers true value to its companies, the VC community, and its government partners."

Peter Fenton, Managing Partner, Benchmark Venture Capital

"Our relationship with IN-Q-TEL has been critical in helping to ensure that our product roadmap and development efforts are in alignment with the needs of the IC community. While we work closely with our commercial customers to ensure that we have prioritized their needs, it is more challenging to get that level of interaction with some government agencies because of the nature of the programs. IN-Q-TEL helps to bridge that gap."

Evident.io, Cloud Security (Executive Name was Not Provided)

"We have a work program as part of the IN-Q-TEL investment, as is typically the case. Through IN-Q-TEL, we've deepened existing relationships and formed new ones in the Defense and Intelligence Community. Other than that, I'm not sure that there's anything that we would say at this time regarding impact on our R&D or strategic roadmaps."

Craig Weich, VP Business Development, Sila Nanotechnologies, Nanotech

"IN-Q-TEL has unique insight into the needs of the IC and broader federal sector and so has been an excellent partner and source of feedback as we develop our product and GTM strategy. They have always taken a very collaborative approach to working with MapD, and there is a high degree of synergy around the shared goal of accelerating federal adoption of GPU-powered analytics."

Todd Mostak, CEO, MapD Big Data

"We are an IQT portfolio company and have successfully graduated their work programs. In the work programs, we worked closely with IQT and their partners to ultimately build value added capabilities that would enable IQT's partners to more easily adopt our technology. IQT has been a great partner and investor and their insights, as being a part of our

Board observers, has given us a solid foundation for future growth and adding shareholder value."

Andy Dearing, CEO, Boundless Spatial, Location-based Data

"So, to answer your question: we're super positive on IN-Q-TEL – they've been a great partner for us – both with Recorded Future and earlier companies. I have personally worked with them for probably soon 12-13 years and the approach and team at IN-Q-TEL is stellar. The actual product programs are run in a very smart way to benefit both the end customer as well as the company in itself – i.e. you don't get asked to build weird stuff that is never used outside very niche cases,"

Christopher Ahlberg, CEO, Recorded Future, Threat Intelligence

In closing, alignment with the pipeline doesn't mean government ownership or political risk and obligation. It is just a means of increasing a business' odds of finding funding and interest from both the private and public sector.