|  |  |  |
| --- | --- | --- |
|  | | |
| Global Satellite Imagery | | |
|  | CREATE VALUE Conversation Roadmap |  |
|  | | |

Table of Contents

[Introduction 3](#_Toc464821363)

[Messaging Framework 3](#_Toc464821364)

[Your Messaging Framework 4](#_Toc464821365)

[Your World Is Changing 5](#_Toc464821366)

[The Planet Point of View: Gain new insights with always on coverage 5](#_Toc464821367)

[Why Planet? 6](#_Toc464821368)

[Business Challenge 1: Inaccurate imagery leads to uninformed decisions 7](#_Toc464821369)

[Business Challenge 2: Inability to derive insights out of the data 9](#_Toc464821370)

[Business Challenge 3: Inability to absorb, consume, and take action on the data 11](#_Toc464821371)

[Appendix: Key Industry Facts 13](#_Toc464821372)

[Your World Is Changing 13](#_Toc464821373)

[Challenge: Inaccurate imagery leads to uninformed decisions 13](#_Toc464821374)

[Challenge: Inability to derive insights out of the data 14](#_Toc464821375)

[Challenge: Inability to absorb, consume, and take action on the data 14](#_Toc464821376)

# Introduction

The Conversation Roadmap is a comprehensive messaging document that translates your company-centric story into a compelling, customer-centric story, based on what that customer wants to accomplish.

The first thing you’ll notice is that this story is “you-phrased”; that is, it’s written from your customer’s perspective, not yours. Writing content this way is very powerful. It focuses the messaging on the customer and makes him or her the hero of the story.

The second thing you’ll notice is that your story follows a logical progression that creates a compelling case for change and outlines a new, safer path. In this way, you take your customer from a “Why Change?” story to a “Why You?” story. Instead of leading with your solution, you lead your customer to your solution.

# Messaging Framework

Your story begins with the **Targeted Conversation Profile**—the intended recipient of your message. During your workshop, you created a story directed at C-level executive.

This individual is struggling with an unsustainable status quo. The **world is changing**, and these changes are creating or exacerbating certain **business challenges** that stand in the way of your customer’s business goals. To stay viable in this changing world, the customer needs to take a new approach—summarized in an overarching “big idea,” characterized as the Planet’s Point of View.

By taking advantage of Planet’s **Power Positions**—capabilities you offer that are important to the customer, unique to you, and defensible (provable)—your customer is able to find this new path, overcome his or her challenges, and change the trajectory of the business.

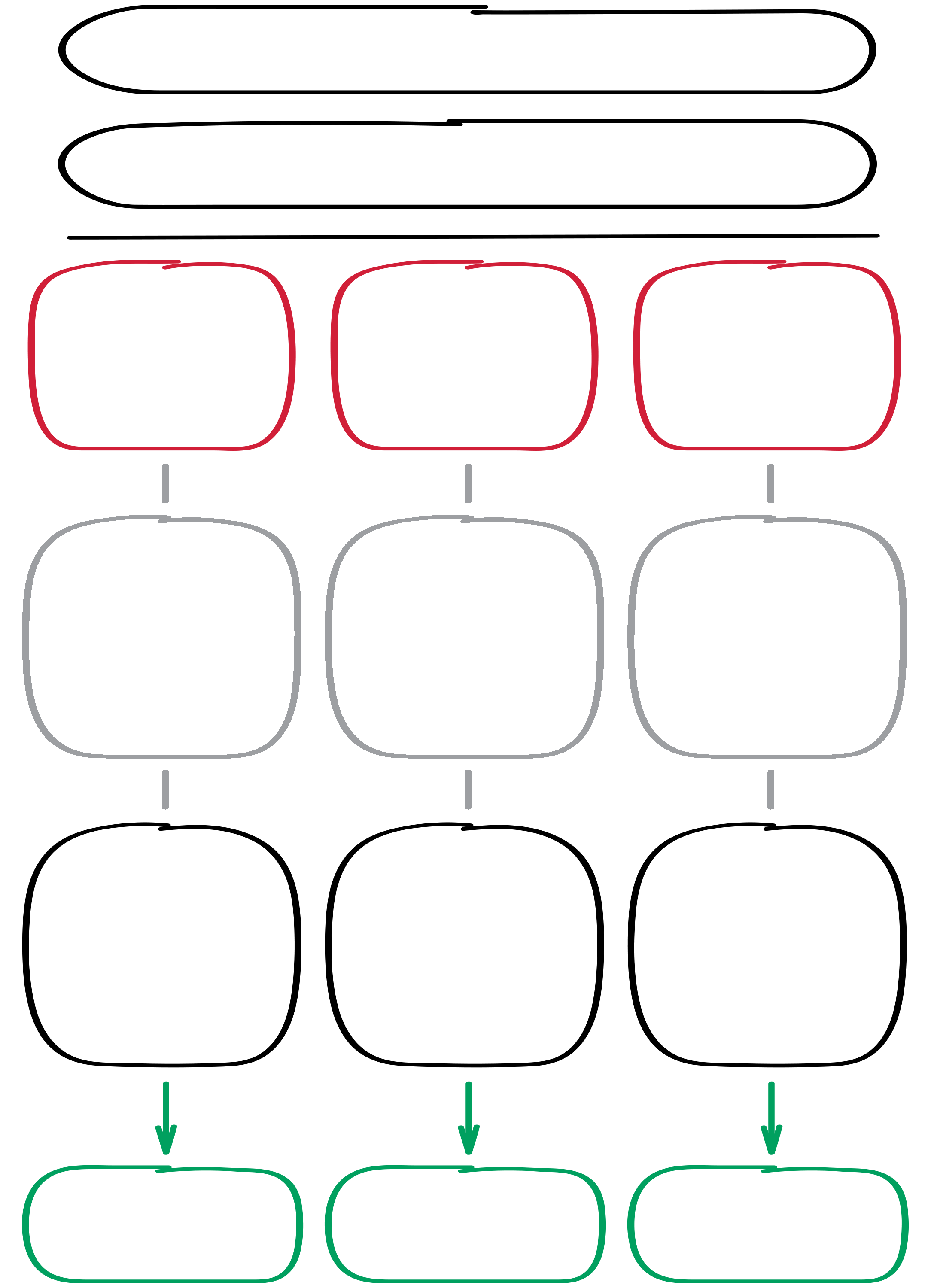
The rest of this document explains to this customer why Planet is the right choice for this individual. You’ll read about each challenge in greater detail, learn about the Planet differentiators he or she can apply to solve the challenges, and see the value he or she can expect to receive as a result.

At its highest level, your story looks like this:

# Your Messaging Framework

**TARGETED CONVERSATION PROFILE**

C-level Executive



Deliver scalable insights throughout your organization

* Make faster decisions with confidence
* Scale beyond what was previously possible
* Make sense of patterns
* Build more extensive models
* Robust analysis
* Make smarter decisions
* Future proof the images you gather
* Full story of what’s happening on ground
* Scalable processing
* Ecosystem of partners
* Planet Platform
* Planet Imagery Archive
* Data diversity
* Global daily imagery
* Ongoing satellite innovations
* 24-hour access to data

Inability to absorb, consume, and take action on the data

Inaccurate imagery leads to uninformed decisions

Gain new insights with always on coverage

**“IS”**

**“DO” /  
“MEANS”**

Inability to derive insights out of the data

**BUSINESS CHALLENGE**

**WHY CHANGE STATEMENT**

**POWER   
POSITION STATEMENT**

Monitor changes on the ground every single day

Extract meaningful patterns using data imagery models

# Your World Is Changing

More data has been created in the past two years than in the entire previous history of the human race.[[1]](#footnote-1)

To make more informed decisions, you must have an accurate and up-to-date understanding of the key areas that affect your business interests, and how those areas evolve over time. In other words, you want to be able to see what’s going on—whether that’s on the ground, in the marketplace, or anywhere in between—and be able to make decisions fast enough to positively impact your business.

To do this, you collect data from a myriad of sources, some gathered on your own and some paid for from other vendors. And every day, that data pipeline gets bigger and more complex. As technology advances, companies are still trying to figure out how to get value from data pouring in from billions of sensors. So, you build models and incorporate new tactics for analysis to interpret and analyze that data.

In addition, they maintain an infrastructure that processes all this data and makes it useful. But conditions are changing so fast that you often can’t gather the most accurate data you need. So, you do the best you can with the data you have at a given time. For example, you might make decisions based on statistical sampling and point measurements. You buy solutions for your needs of today. Sometimes, that works out well for you. If the conditions are right, you get some insight from a particular data set. But as conditions change, that same data set becomes obsolete, no longer giving you an accurate view of what’s happening in your world. In other words, conditions change but you can’t see *how* they change. This results in missed opportunities, as well as loss of competitive advantage, since you’re making decisions based on inaccurate data.

# The Planet Point of View: Gain new insights with always on coverage

Instead of piecing together event-driven information that gives you a partial picture of what’s truly happening, you need a steady stream of data to constantly monitor what you care about most.

By taking advantage of daily global satellite imagery data, you can leverage a new disruptive data set that features “always on” coverage of the entire planet every single day. This means you can constantly monitor *all* your areas of interest, with more frequency, no matter how much conditions adapt and change. It’s about digitizing information about your world and making it accessible and actionable. Via satellites as tiny as a shoebox, you can gain “ground truth” imagery of the areas you care most about. And as more data streams in, you can develop new insights, as well as identify specific areas of opportunity and vulnerability. So as the world turns, and conditions evolve and change, you can win with more consistency by making smarter decisions faster, and truly understanding all the areas that matter most you.

# Why Planet?

And that’s why companies are turning to Planet.

By partnering with Planet, you can **gain new insights with always on coverage** of the areas you care most about. Our goal is to image the entire earth, making change on our planet visible, accessible, and actionable. We use consumer-grade electronics to build highly capable satellites at drastically lower costs. With the most advanced satellites launching into orbit every 3-4 months, our capabilities are on the cutting edge and always advancing. That means no matter what market you’re in, with the promise of global coverage same-day satellite image data, you can leverage disruptive new data sets that give you a competitive advantage in your industry.

With Planet, you can:

* Monitor changes on the ground every single day: Typical online satellite imagery simply doesn’t give organization the “ground truth” needed to make accurate and actionable decisions. With Planet, you can monitor the areas you care about every single day, giving you a true understanding of the business implications of change on the earth’s surface. By taking advantage of the imagery from Planet’s constellation of global satellites, you can capitalize on changes in your environment, continuously improve the data imagery you gather, and make more informed decisions with the most up-to-date and actionable data right at your fingertips. With access to fresh and easily accessible global imagery data every single day, you can gain tremendous insight, more actionable outcomes, and a better understanding of your changing world.
* Extract meaningful patterns using data imagery models: Unless you can process all the data coming in, you’re effectively stuck with a trove of relatively useless information that just keeps growing every day. With Planet, you can extract meaningful patterns using cutting-edge imagery data models that give you actionable insights from the data you gather. In other words, you can take all the global imagery data coming in, combine it with your existing data, and create meaningful models you can use for your specific areas of focus. It all starts with the Planet Platform, on which you can integrate global imagery within your existing infrastructure to run analysis, regressions, and to build new models based on the trove of new data coming in. With Planet, you can also train your model on a deep stack of analytics-quality, high-cadence archive imagery, giving you a more precise historical perspective of your areas of interest. And you can also leverage multiple sources of geospatial data—high, medium, and even hyper spectral resolution—all through a single API.
* Deliver scalable insights throughout your organization: Without a way to process and scale massive amounts of data, you can’t derive the best possible value from all the global satellite images coming in. With Planet, you get the system, the processing power, as well as the platform to develop this data and deliver scalable insights throughout your organization. For example, with scalable processing of our global data imagery, you can make low latency predictions anywhere in the world. And with Planet’s vast ecosystem of partners, you can leverage other expert insights, and tailor results based on your expanding needs. In this way, Planet gives you the power to use the data you bring in to discover new paths, break through to new opportunities, and gain a competitive advantage in your industry.

# Business Challenge 1: Inaccurate imagery leads to uninformed decisions.

Today, small satellites used for observing conditions on the earth are the fastest growing segment of the $260.5 billion global satellite industry.[[2]](#footnote-2)

For organizations that need an accurate and up-to-date view of conditions on the ground, global satellite imagery is an incredibly exciting prospect. Farmers can assess crop health and view the effects of weather in their land. Hedge fund managers can scour parking lots at large department stories to measure traffic flows. Governments can monitor military buildups and operational movements. While the need is clear, all too often organizations lack the ability to detect the true, real-time changes happening on the ground. That’s because most free satellite imagery online today is several years old. And at best, images are available once a week. But events don’t happen once a week; they’re continuous, always changing and adapting. If the event happened in the past, it’s far too late to take any action on it.

A typical tasking process for imagery involves placing an order and waiting to hear back. Even then, there might be clouds preventing the capture of that image area. Considering that 67 percent of Earth’s surface is typically covered by clouds,2 the odds are good that many images aren’t at all useful. And you have to wait several more days, or even weeks, until the clouds go by and you get the next opportunity.

And that’s when important events are missed. For example, an oil company with a damaged pipeline might need to deploy resources to immediately to fix a problem. But if images come in sporadically, like once every seven days, the company might not know the severity of the problem, or how it’s progressed. They simply piece together bits of information and hope it’s accurate. It’s this uncertainty gap that leads to uniformed decisions and wasted money and resources, all because they’re not getting the full story of what’s happening on the ground.

**What if you could monitor changes on the ground every single day?**

Typical online satellite imagery simply doesn’t give organization the “ground truth” needed to make accurate and actionable decisions. With Planet, you can monitor the areas you care about every single day, giving you a true understanding of the business implications of change on the earth’s surface. By taking advantage of the imagery from Planet’s constellation of global satellites, you can capitalize on changes in your environment, continuously improve the data imagery you gather, and make more informed decisions with the most up-to-date and actionable data right at your fingertips. With access to fresh and easily accessible global imagery data every single day, you can gain tremendous insight, more actionable outcomes, and a better understanding of your changing world.

|  |  |
| --- | --- |
| How you can solve this challenge with these Planet differentiators:  Global daily imagery: Photos of the entire global land mass every 24 hours.  Ongoing satellite innovations: Planet’s ability to rapidly improve and deploy new satellite constellations.  24-hour acquisition of data: Ability to make imagery available for analysis within 24 hours of image acquisition. | Capitalize on the changes in your environment: Without knowing the truth on the ground, you can’t truly assess what’s happening in your areas of interest. With Planet’s global daily imagery, you can monitor all the areas that are critical to your organization, everywhere, every single day. Planet’s fleet of Dove satellites take pictures of the entire global land mass every 24 hours. That means you can access high resolution images of your critical areas on a consistent basis, giving you immediate access to high-frequency imaging of the entire planet. For example, you can see trees being cut, fields harvested, roads built, crowd movement, virtually any changing trend over time. Traders of oil and commodities can see increased production and exports in various countries, and can trade against that. First responders can immediately identify areas of need during a natural disaster. And an insurance company can accurately assess damage from a hail storm by comparing before and after images of homes or vehicles. With this consistent stream of imagery, you can extract information you find valuable, make smarter decisions, and capitalize on changes in your area of the world. |
| Continuously improve the data imagery you gather: Capturing global imagery of your areas of interest can give you a good amount of insight, but what about tomorrow, or next year, or the next decade? As the world keeps turning, and life on the ground keeps changing, you need the ability to keep up with the changing landscape. When you partner with Planet, you can continually access new and improved data sets of your areas of focus on the globe. Today, with all 149 of our satellites in place, Planet can photograph every inch of Earth’s surface every day—something even the U.S. government can’t do. And we’re just getting started. Planet’s ability to rapidly improve the deployment of new satellite constellations means you get access to continuously improved sets of data. This includes everything from the number of times you can monitor a day, to the various spectrum of colors you can see. We’ve revamped our Dove satellites 14 times since being founded, and we aren’t stopping there. Planet continues to improve technologies and build for the future, filling the skies with satellites that capture the truth of what’s happening in the world. And when it comes to growth, this means you can future proof the information you gather, knowing it’s continuously updated and improved as each day goes by. |
| Make more informed decisions with constantly updated imagery data: Most online satellite imagery is weeks, even months, old by the time you’re able to actually view it. With Planet, you can constantly add critical data to your system to enhance your decision-making ability and maximize opportunities in your areas of interest. From the moment an image is taken by one of our Dove satellites, you can be looking at it on your laptop within 24 hours. With this ongoing daily imagery, you can keep going back to a specific area, day after day, to get the full story of what’s happening on the ground. |
|  |  |

# Business Challenge 2: Inability to derive insights out of the data

Satellite imagery gives businesses and organizations some of the most amazing data the world has ever seen. It also gives you a massive amount of additional data to deal with. For many organizations, it’s a huge challenge trying to make sense of it all. What’s the use of some of the most amazing data in the world if you can’t make use of it? Think about it: With multiple images flooding in day after day, unless you have a way of processing this onslaught of information, it’s just going to keep piling up. Extensive resources are required to integrate multiple data sets flowing in from all directions. For example, hedge funds consume multiple information streams such as customer data, credit card data, and market trends. Retail companies depend on multiple data sources like foot traffic, buying behavior, and promotions to better understand and predict consumer behavior. In fact, Walmart handles more than 1 million customer transactions every hour, which is imported into databases estimated to contain more than 2.5 petabytes of data.[[3]](#footnote-3) It’s no different in agriculture or virtually any other large business.

To make all this data meaningful and useful, a team must extract everything coming in from different sources, clean it up, code it, tag and transfer it, then store it to be used at a later date. That’s not only costly in terms of resources, but incredibly complex due to the various siloed data troves organizations have to deal with. Then there’s this: As each satellite is built and launched, data sets from global imagery are growing more complex as well. Unless businesses can process this avalanche of data, they’re going to be buried, unable to derive the insights needed to make accurate decisions about what’s happening on the ground.

What if you could extract meaningful patterns using imagery data models?

Unless you can process all the data coming in, you’re effectively stuck with a trove of relatively useless information that just keeps growing every day. With Planet, you can extract meaningful patterns using cutting-edge imagery data models that give you actionable insights from the data you gather. In other words, you can take all the global imagery data coming in, combine it with your existing data, and create meaningful models you can use for your specific areas of focus. It all starts with the Planet Platform, on which you can integrate global imagery within your existing infrastructure to run analysis, regressions, and to build new models based on the trove of new data coming in. With Planet, you can also train your model on a deep stack of analytics-quality, high-cadence archive imagery, giving you a more precise historical perspective of your areas of interest. And you can also leverage multiple sources of geospatial data—high, medium, and even hyper spectral resolution—all through a single API.

|  |  |
| --- | --- |
| How you can solve this challenge with these Planet differentiators:  Planet Platform: Planet’s APIs and data infrastructure are designed to make it easy to work with and perform analytics on geospatial information.  Imagery Archive: Refers to Planet’s archive of imagery since 2009 for RapidEye, 2016 for PlanetScope, and 2014 for SkySat; all imagery has been processed to make analytics.  Data Diversity: Search capability from many different sources on the Planet Platform, including  PlanetScope, RapidEye, SkySat, Sentinel-2, and Landsat 8 data sets. | Build new models with simplified data: Trying to process the millions of images taken by a constellation of satellites of the earth’s surface is thedefinition of complexity. With Planet, you can integrate global imagery within your existing infrastructure to run analysis, regressions, and to build new models based on the trove of new data coming in. The Planet Platform is the most advanced, cloud-based imagery platform available. It’s designed to be fast, intuitive, and highly scalable, delivering high-resolution imagery from Planet’s array of satellites. It passes the imagery through a fully automated processing pipeline, makes it available to you online, and provides you with APIs and browser-based tools designed to make it easy to work with and perform analytics on geospatial information. That means you get access to data which is cleaned and prepared for machine learning. No more need to hire geospatial analysts or expand your workforce to get more high-cadence data. In addition, the Planet Platform is built to ingest 150 million km2 of imagery each day, more than any other service. With this kind of coverage and processing power, you can better understand and make sense of the patterns in the data you receive. |
| Train your model on a deep stack of analytics-quality, high-cadence archive imagery: When building out an extensive predictive model, you need a large amount of high quality data. With Planet, you can enhance your existing data model with a history of seamless, spatially-accurate satellite imagery. Our ever-growing imagery archive dates to 2009, and includes over 10 billion square kilometers of high-resolution satellite imagery, all tagged and easily accessible online.  You can log in to the archive and browse the images as you want. For example, if you want specific data from a certain region, you can build a model based on the data in that area and then apply that to an ongoing monitoring program. This can tell you what’s happening in that area every day for the next three years, or however long you want to monitor it. This gives you a tremendous data set in which you can train your machine learning and computer algorithms to build more extensive predictive models. |
| Immediately leverage multiple sources of geospatial data through a single API: Organizations want data diversity but can’t make sense of all of it coming in. With Planet, you can immediately leverage multiple sources of geospatial data—high, medium, and even hyper spectral resolution data—all through a single API. For example, you can search catalogs from our global archive, download specific imagery along with all the metadata needed, build your own applications on top of our API, integrate Planet imagery with your own applications and workflows, and define an area of interest and get alerts when new images appear in the catalog. All of this gives you robust analysis from many different sources, as well as the ability to integrate future data sources as well. |
|  |  |

# Business Challenge 3: Inability to absorb, consume, and take action on the data.

With troves of satellite imagery, and a model to help churn all the data, the next step is to be able to process it all, to deploy unique solutions across your entire organization so everyone can access it. But many organizations are unable to absorb and consume all this information, nor can they integrate it into their environment. In other words, they can’t get actual value out of the data, nor can they scale it as needs arise in the organization. For example, you might not have the compute power to run this massive amount of data. Developing a customized solution around all this data requires resources beyond your scope of work. That means bringing in an array of data analysts, writing machine learning algorithms, and doing things like statistical anomaly testing. There’s a lot of data points to deal with over a series of time. And many organizations just don’t have the processing power, let alone the infrastructure, to make this data actionable and able to adapt to your changing needs.

What if you could deliver scalable insights throughout your organization?

Without a way to process and scale massive amounts of data, you can’t derive the best possible value from all the global satellite images coming in. With Planet, you get the system, the processing power, as well as the platform to develop this data and deliver scalable insights throughout your organization. For example, with scalable processing of our global data imagery, you can make low latency predictions anywhere in the world. And with Planet’s vast ecosystem of partners, you can leverage other expert insights, and tailor results based on your expanding needs. In this way, Planet gives you the power to use the data you bring in to discover new paths, break through to new opportunities, and gain a competitive advantage in your industry.

|  |  |
| --- | --- |
| How you can solve this challenge with these Planet differentiators:  Scalable Processing: Ability to use machine learning to sharpen images and enhance basemaps.  Planet’s ecosystem of Partners: Partner relationships from a wide variety of industries. | Make low latency predictions anywhere in your areas of interest:  With potentially millions of images pouring in day after day, you need a way to process them all and ensure they’re giving you the information you need. With Planet’s scalable processing of our global data imagery, you can make low latency predictions anywhere by looking at images over a broad series of time. This is done through Artificial Intelligence (AI) and machine learning to sharpen the images, enhance basemaps, and put the pieces of the image puzzle together. Blurs and clouds inhibiting the image are gone. Images are seamlessly stitched together if needed, sometimes combining up to 20 satellite images together, giving you a more complete basemap of the area you care about. As a result, you can make faster decisions with higher confidence. |
| Build flexible and more customized solutions: Companies might want the end data, but often don’t have the resources to write machine learning algorithms. Their data processing ability can only take them so far. With Planet’s ecosystem of partners, you can build flexible and more customized solutions by leveraging the insights from other experts. That means you can tailor our results based on your expanding needs. No matter what your industry, you can tap into expert insights to create a whole new set of derived data. For example, a financial institution can develop an algorithm for their hedge fund managers. This is beyond Planet’s scope. But with our ecosystem of partners, you scale beyond what was previously possible. |
|  |  |
|  |  |

# Appendix: Key Industry Facts

Use the following industry facts as “grabbers,” or attention-getting statements to encourage the customer to think differently about his or her situation.

## Your World Is Changing

* Data is growing faster than ever before and by the year 2020, about 1.7 megabytes of new information will be created every second for every human being on the planet. **Source:** Forbes
* For a typical Fortune 1000 company, just a 10% increase in data accessibility will result in more than $65 million additional net income. **Source:** Forbes
* Bad data or poor data quality costs US businesses $600 billion annually. **Source:** *Big Data Facts and Statistics That Will Shock You,* Fathom, 2012
* Companies will put a priority on systems that “support large volumes of both structured and unstructured data. **Source:** *Top Ten Big Data Trends for 2017*, TDWI and Tableau Software Report, 2017
* There will be a rapid rise in demand for platforms that help data custodians govern and control their big data implementations while also allowing that data to be accessible from scientists, analysts, and general business users.**Source:** *Top Ten Big Data Trends for 2017*, TDWI and Tableau Software Report, 2017

## Challenge: Inaccurate imagery leads to uninformed decisions.

* [Decades of satellite observations](http://earthobservatory.nasa.gov/IOTD/view.php?id=85736) and [astronaut photographs](http://earthobservatory.nasa.gov/IOTD/view.php?id=82012) show that clouds dominate space-based views of Earth. **Source:** *Earth Observatory Data*, NASA, 2017
* One [study](http://dx.doi.org/10.1109/TGRS.2012.2227333) based on nearly a decade of satellite data estimated that about 67 percent of Earth’s surface is typically covered by clouds. This is especially the case over the oceans, where [other research](http://www.sciencedirect.com/science/article/pii/B9780123822253001134) shows less than 10 percent of the sky is completely clear of clouds at any one time. Over land, 30 percent of skies are completely cloud free. **Source:** *Earth Observatory Data,* NASA, 2017
* Small satellites, some no bigger than a shoe box, generated an 11 percent jump in annual revenue for Earth imagery in 2016 and a growing share of the 1,459 operating spacecraft that circled the planet at the end of the year. **Source:** *Satellite Industries Association Report,* 2017
* Small satellites used for observing conditions on the earth are the fastest growing segment of the $260.5 billion global satellite industry. **Source:** *Satellite Industries Association Report*, 2017
* Satellite services, including home television, broadband and Earth observation services, collectively generated $127.7 billion of revenue in 2016, the biggest single piece of the industry, according to the report. **Source:** *Satellite Industries Association Report,* 2017
* Satellites used for earth imagery accounted for just $2 billion of the total industry but accounted for 11 percent of the sector’s growth. **Source:** *Satellite Industries Association Report,* 2017

## Challenge: It’s complex to integrate new data and make it meaningful.

* In fact, Walmart handles more than 1 million customer transactions every hour, which is imported into databases estimated to contain more than 2.5 petabytes of data. Source: Bi*g Data Meets Big Data Analytics*, SAS Whitepaper

## Challenge: Inability to absorb, consume, and take action on the data.

* N/A

1. *Big Data: 20 Mind Boggling Facts Everyone Must Read, Forbes, 2015* [↑](#footnote-ref-1)
2. *Satellite Industries Association Report*, 2017 [↑](#footnote-ref-2)
3. *Big Data Meets Big Data Analytics,* SAS Whitepaper [↑](#footnote-ref-3)