

# Synergies in the Stack

The New Way Product Teams  
Combine Technologies to Build  
Innovative Digital Experiences

APRIL  
2019



## TABLE OF CONTENTS

**P2** The New Way SaaS Technology Works Like a Team

**P3** The Golden Age of Tools and Technology

**P4** The Shift From Suites to Stacks

**P5** How to Teach Your Tools to Talk

**P5** The Synergies of Software Stacks: A Case Study

How Metromile is Innovating in the Auto Insurance Category

Finding and Tracking Bugs With Jira and FullStory

Getting More From Experiments and A/B Tests With FullStory and Optimizely

**P9** Extending the Benefits of Software Stacks With the DXS

**P10** The Future Will Be Built Through Innovation—Software Stacks Will Help

**P11** The DXS Partners

## The New Way SaaS Technology Works Like a Team

The relentless stream of technological progress over the last quarter century has conditioned consumers to expect the problems of today to be solved by innovation tomorrow.

In order to meet these impossibly high customer expectations, builders of digital products, apps, and websites must deliver near-perfect digital experiences. For example:

- eCommerce sites and apps must work predictably and be fast. Any sluggishness or errors in the checkout flow will mean lost sales.
- Software-as-a-Service (“SaaS”) providers must make it obvious how the product improves workflows. Bad—or even simply just inefficient—experiences rapidly turn into churn or worse: bad reviews.

For every digital product, the competition is always a quick click, tap, or search away. Any missteps in the customer experience could result in even your most loyal customers leaving to never return.

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32% of all customers would stop doing business with a brand they loved after one bad experience.

THE FUTURE OF CX REPORT  
PRICEWATERHOUSECOOPERS, 2018

Product teams are in constant need of innovative solutions to ensure high customer expectations are met—or even surpassed. The most agile teams have moved beyond the traditional paradigm of software suites and tapped into powerful, specialized technology stacks. “Stacks” represent novel software combinations that unlock synergistic value, specifically through seamless integrations.

Through software stacks, data can flow freely where it’s needed, eliminate roadblocks, and empower teams to find the answers to even the most mysterious product problems quickly and easily.

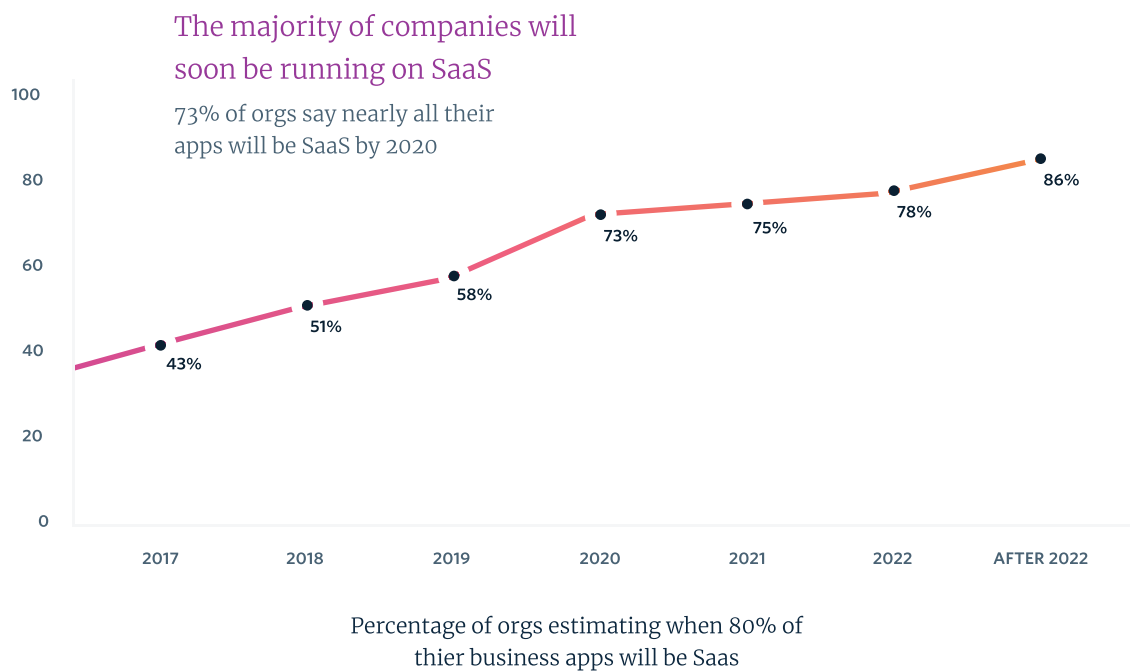
## The Golden Age of Tools and Technology

Today, digital product and dotcom teams live in a golden age of tools and technology.

Thanks to investment and growth in the SaaS industry, companies of all sizes, ranging from the smallest business to the largest enterprise, have plugged in tools and technology to help them work faster and more effectively.

The unique benefits of SaaS have led to significant growth in adoption. Indeed, by 2020, three out of four organizations expect the majority (80%) of their apps will be SaaS.

Of course, while SaaS adoption is a relatively new solution to meeting the workflow needs of product teams, it hasn't always been this way.



## The Shift From Suites to Stacks

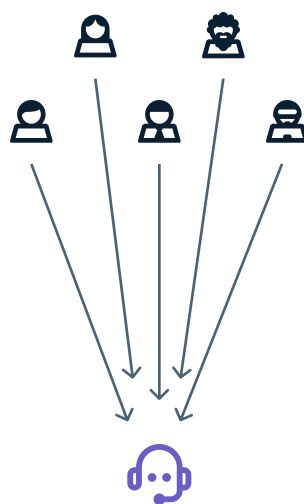
The current shift from software suites to cloud-based software stacks is revolutionizing how organizations use technology to get work done.

In the past, teams turned to software suites to meet their needs. Suites offered an all-inclusive set of tools for one price. Unfortunately, the grand scope of suites made them unwieldy to manage and often less specialized in their capabilities.

By comparison, SaaS products specially designed to solve singular problems bring a competitive advantage of focus. Specialized software is able to offer best-in-class solutions to very specific problems, incorporate new innovations into their product offerings, and move quickly—especially compared to the glacial pace of software suites. Finally, when you aren't locked into a suite, you can pick up the software you want, “a la carte.” This added agility can make for happier teams and reduced expenses.

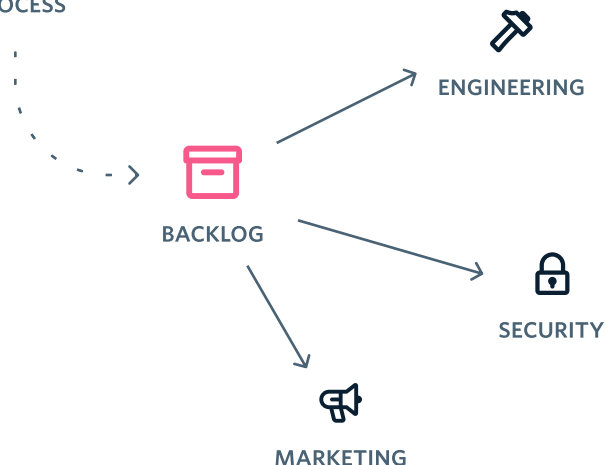
Of course, there's a catch. For teams to get the most out of these specialized SaaS solutions, the services must work well together.

### FRUSTRATED CUSTOMERS



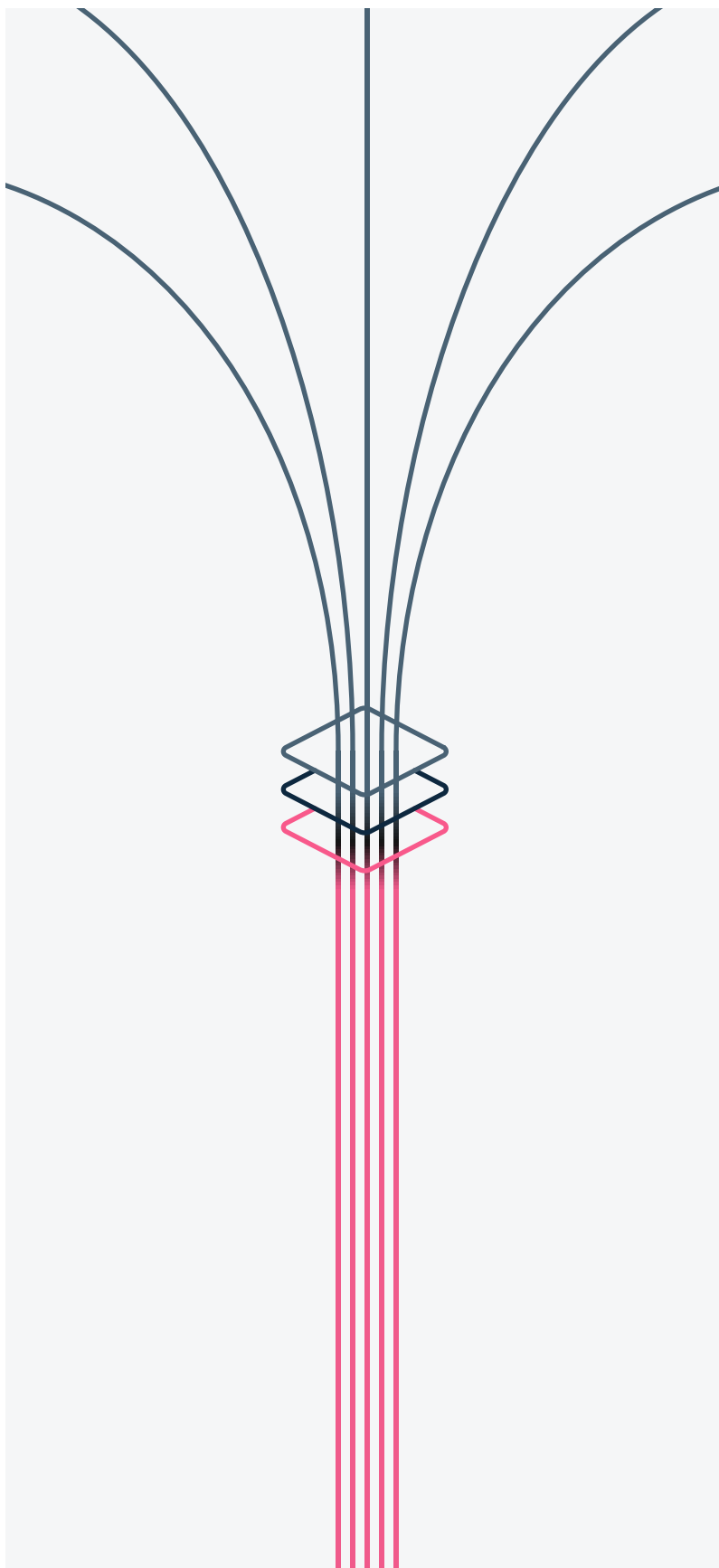
### CUSTOMER SUPPORT

### MANUAL HANDOFF PROCESS



For example, say your best-in-class software development solution lacks an integration with your cutting-edge support desk. With no integration, errors found by customers and received by support get stuck until support can manually pass information to engineers. The added back-and-forth creates friction in the workflow and slows progress.

That's why, once you've jettisoned your software suite in favor of a la carte SaaS products, the next step is to integrate your technology into a software stack.



# The Synergies of Software Stacks

A CASE STUDY WITH

*metromile*



What happens when your software works together—like a team? What efficiencies are possible when you synchronize workflows in such a way that data flows freely between technologies?

To illustrate the kinds of things possible when your software stack works efficiently, we spoke with Metromile, an innovative auto insurance provider.



## HOW METROMILE IS INNOVATING IN THE AUTO INSURANCE CATEGORY

On the off chance you're thinking about insurance, it's likely because you're insuring something you love—you don't love your insurance company. Metromile is out to change that. Metromile is a car insurance company using data science and machine learning to build a community of drivers who come for the savings and stay for the experience.

With data science and machine learning at its core, the company is streamlining and improving typical insurance processes that have generally been considered burdensome—whether it's purchasing a policy, making adjustments to it or filing a claim. The company also offers new features—street sweeping alerts, engine code analysis, fuel tracking—that engage a customer all along their journey. To ensure the customer experience consistently exceeds expectations, Metromile has created a software stack to help qualitatively and quantitatively identify trouble spots and opportunities for improvement. The SaaS software in their stack includes Amplitude, Jira, FullStory, and Optimizely.

Let's examine how some of these tools work together.



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## FINDING AND TRACKING BUGS WITH JIRA AND FULLSTORY

With Jira, Metromile actively tracks bugs and user stories. With FullStory, Metromile observes, qualitatively, how their new product features perform in the wild, hoping to catch any unforeseen usability issues.

Thus, while using FullStory, if a bug is observed, a note is added to the FullStory session, which is then sent to Jira to be prioritized by the team. Through the integration from FullStory to Jira, the resulting issue tracked in Jira will include relevant details about the bug—as captured by FullStory—as well as a link to replay the session in FullStory. Once issues discovered in FullStory are passed to Jira, Metromile is able to manage and resolve them.

This simple workflow from two separate SaaS tools reduces time spent solving coding errors and customer experience problems. Developers get just what they need from FullStory while being able to manage resolution successfully through Jira.

Apart from managing workflows and issue tracking, Jira sounds the alarm when a feature breaks or regresses. Even with thorough testing, things can go wrong. For example, Metromile once had a bug slip through the cracks that related to some of their key responsive web flows. Certain browser resolutions were failing to be laid out correctly. Once observed and confirmed in FullStory, the session recordings were immediately passed to Jira, complete with all of the FullStory session info (E.g. metadata including Page URL, IP address, UserAgent data, Viewport, and more). Logged in Jira, the issue is ready to be triaged and worked on in the next sprint.

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At Metromile, Jira and FullStory each independently solve different problems, but through their integration, we're able to move faster, which is critical as we improve our product.

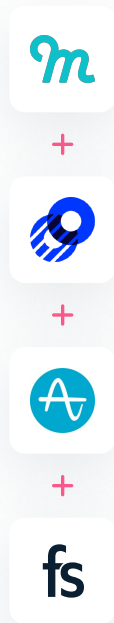


Matt Stein

VP OF PRODUCT DESIGN  
METROMILE

This efficient workflow for surfacing, logging, and solving bugs is only possible through synergies activated by a seamless integration of Jira and FullStory.





## GETTING MORE FROM EXPERIMENTS AND A/B TESTS WITH FULLSTORY, OPTIMIZELY, AND AMPLITUDE

Metromile focuses on constant iteration to improve the customer experience. Metromile uses Optimizely to run experiments across various products. Optimizely makes building these tests (E.g. A/B tests) easy and, on the completion of the experiment, can report out which variant of a test is the statistically significant winner. Only sometimes, no variant wins. When this happens, the Metromile product and design teams turn to Amplitude and FullStory to determine why.

Through an integration with FullStory, Optimizely test variants are indexed and searchable directly within FullStory. That means Metromile is able to simply search for the Optimizely test directly within FullStory. The search results in FullStory will include all sessions from the variant. From there, Metromile's product and design team can replay FullStory session recordings quickly. Watching these sessions enables Metromile to see the nuanced behaviors of real customers as they navigate each variant. Using this qualitative research, Metromile can confidently identify why one variant is likely to improve conversion and another does not—even when no statistically significant winner is ready.

For example, Metromile uses Optimizely to run experiments to help determine:

- How to best enable the user to estimate their mileage
- What CTAs (call to actions) have the highest conversion
- What ordering of the quoting process makes the most sense and results in higher conversion

Once the Metromile team tests variants in Optimizely, they turn to FullStory to observe differences in customer experiences across the tests. Based on observations collected through this qualitative research in FullStory, Metromile finds and fixes usability issues involving, for example, mileage estimation—or layout issues, copy optimization, and more.

Matt Stein shares, “With Optimizely we are able to run experiments on our customer’s digital experience. We then use Amplitude to analyze results quantitatively and FullStory to understand the customer experience qualitatively.”

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Matt Stein

VP OF PRODUCT DESIGN  
METROMILE

As evidenced, while Optimizely and FullStory were doing important jobs separately, through an integration across the two services, significant additional value was unlocked.



## Extending the Benefits of Software Stacks With the DXS

The Metromile case study makes one thing clear: integrating specialized SaaS software so that data flows freely results in clear, synergistic benefits. The whole is greater than the parts.

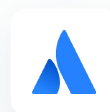
Early successes—such as Metromile’s use of Optimizely, FullStory, Jira, and Amplitude—have inspired a group of leading SaaS technology providers to focus efforts around a common vision: that of building software that works well together, just like a team.

The result is an initiative launched in 2018 called the Digital Experience Stack or “DXS.” The objective of the DXS is to forge strong, well-supported integrations—the kind that ensure the data across the tech stack flows smoothly and predictably.

Led by Optimizely, the DXS eight members are:



Amplitude  
ANALYTICS



Atlassian  
COLLABORATION



AWS  
CLOUD SERVICES



Contentful  
CONTENT MANAGEMENT



Fullstory  
DIGITAL EXPERIENCE  
INTELLIGENCE



New Relic  
PERFORMANCE MONITORING



Optimizely  
EXPERIMENTATION &  
PERSONALIZATION



Tealium  
TAG MANAGEMENT

If you're unfamiliar with these tools, you can find a brief overview of what each offers at the end of this content.

## The Future Will Be Built Through Innovation—Software Stacks Will Help

Building incredible products—the kind that exceed customer expectations—requires both innovation and workflows that enable teams to understand, track, and improve the customer experience. While the software suites of the past performed honorably in this regard, cloud-based SaaS technologies have changed the game.

And this is only the beginning.

As customer expectations continue to increase, the next market leaders will look to alliances like the DXS to improve workflows and unlock new product insights.

How will your team take advantage of technology to meet—or even surpass—your customers' demands?



How can FullStory help your tech stack  
work like a team?

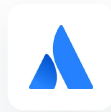
[Request a demo.](#)

## The DXS Partners



Amplitude  
AMPLITUDE.COM

Amplitude helps companies understand user behavior through analytics. Product insights revealed in Amplitude help teams make decisions confidently that propel the business forward.



Atlassian  
ATLASSIAN.COM

Atlassian provides collaboration services that help teams build and improve digital products. Atlassian is best known for Jira, the leader in error- and issue-tracking software used for agile project management.



AWS  
AWS.AMAZON.COM

Amazon Web Services, better known as AWS, is the largest cloud services platform in the world. AWS provides businesses with scalable services including computing power, database storage, content delivery, and too many others to list.



Contentful  
CONTENTFUL.COM

Contentful eliminates the need to manually update content across disparate content management systems by providing powerful content infrastructure. Contentful makes it easy to create and update content wherever it lives—websites, apps, kiosks, digital signage, and more.



FullStory  
FULLSTORY.COM

FullStory helps product managers and teams across an organization know just what customers are doing online through their industry-leading digital experience intelligence platform. Everyone from product managers and developers to marketing, sales, and support turn to FullStory to solve the most perplexing product and digital experience problems through the clarity of FullStory.



New Relic  
NEWRELIC.COM

New Relic is helps companies consistently improve their software performance through making it easy to identify problems such as where websites and apps are slowing down. Companies turn to New Relic to monitor, detect, track, and fix errors to improve performance, and in turn, the digital experience.



Optimizely  
OPTIMIZELY.COM

Optimizely makes it easy to experiment and personalize customer experiences online across websites and mobile apps. Using continuous experimentation on Optimizely is the leading way to iterate and improve the customer's digital experience.



Tealium  
TEALIUM.COM

Tealium collects customer data from any source—websites, mobile applications, devices, kiosks, servers, files and more—to help companies create a universal “data layer.” Tealium’s universal data hub results in a uniform taxonomy, hierarchy, classification and structure for enterprise data.