

**Acquia**  
EXPERIENCE DIGITAL FREEDOM

# ***BUILDING THE COMPOSABLE ENTERPRISE***

**The True Digital Transformation**



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**SECTION 01**

**WHAT'S  
HOLDING  
YOU BACK?**





## Your enterprise architecture should drive innovation. Not limit it.

The digitalization of the customer journey continues to accelerate. Customers want and expect relevant, personalized experiences on a brand's website and across branded channels. Trying to meet these expectations often reveals an inconvenient truth:

### ***THE LEGACY TECHNICAL ARCHITECTURE THAT BRANDS HAVE BUILT CAN'T SUPPORT THE TYPES OF DIGITAL INTERACTIONS THAT DRIVE BUSINESS TODAY.***

This legacy architecture – which is neither agile nor open – reflects an outdated paradigm focused on building and maintaining monolithic sites. Not only does it make innovation very resource-intensive and slow things down, it can mean that brands struggle to innovate at all.

The result is an innovation gap. Bridging this gap calls for a new approach to enterprise architecture.

Today, brands need a “composable” architecture. In this model, defined most recently by Gartner, packaged business capabilities serve as the fundamental application building blocks for the entire enterprise. “Composability” extends from the application layer all the way through to the experience layer. And it lets brands leverage composable content, composable data, composable design and composable journeys to fuel composable engagement.

Think about what an enterprise architecture has to do. Starting from the outside in, it has to support an amazing, personalized customer experience. It has to make it possible for business users to easily create and evolve this experience. Finally, it has to support developers, giving them flexibility to create the tools the enterprise needs while also ensuring security, data privacy and regulatory compliance.

**Composability offers all this and more.**

In this e-book, we will take a closer look at the composable enterprise. We will pay particular attention to the ways composability changes how organizations approach digital experience. Given the central role played by content and data in the creation of digital experiences, we will discuss how composability enables and enhances these core capabilities. We will also describe how composability reinforces governance and security.

Above all, we hope to make one thing crystal clear: Composability is the key to remaining relevant. It is the only way to quickly and continuously innovate as you evolve your customer experience.



**SECTION 02**

**DIGITAL  
TRANSFORMATION  
THROUGH A  
HUMAN LENS**







When seeking to modernize enterprise architecture, it's tempting for IT leaders to start with back-end systems. After all, the business depends on the underlying network and the connectivity it provides. If the goal is digital transformation, making sure you are building on a solid foundation makes sense.

But to build the right foundation, you need to begin with the end in mind: Meeting the needs of people across the enterprise. Ensuring that customers and prospects, marketing and sales, admins and devs all get what they need calls for a people-centered approach to enterprise architecture. And a people-centered approach focuses on optimizing the experience for everyone involved.

### **OPTIMIZING THE CUSTOMER EXPERIENCE**

It all starts with understanding how customers engage with the organization and how they want to engage with it. Based

on the engagement model, a people-centered approach focuses on ways to optimize it for each customer.

1-to-1 personalization fulfills this vision of a fully optimized customer experience.

### **OPTIMIZING THE EMPLOYEE EXPERIENCE**

Even when customers primarily interact with the brand digitally, it is the brand's employees who design, deliver and support the experiences that customers have. A people-centric approach takes this into account as well. The goal here is to ensure that employees have the tools they need to do their jobs and that the tools are easy to use.

An architecture optimizes the employee experience by providing intuitive, purpose-built tools that support flexibility, autonomy and speed.



## OPTIMIZING BACK-END SYSTEMS

Back-end systems support both the customer experience and the employee experience. On the customer side, these systems must enable ever higher degrees of personalization. On the employee side, these systems must provide efficiency and scale.

A people-centered approach to back-end systems means optimizing the experience for those who build and maintain the tools the entire enterprise depends on.

## THE COMPOSABLE FOUNDATION

Only a flexible architecture, one featuring low-code and no-code tools, allows for the ongoing creation, delivery and optimization of personalized experiences for customers and employees at scale.

Composability offers this flexibility through an emphasis on modularity, connectivity and ease of use.

More importantly, the composable approach to flexibility actually reinforces governance and ensures security. It does so by establishing a defined governance model for the development of self-service tools and packaged business capabilities, all deployed as functional, configurable modules. In other words, **a composable architecture is secure and governable from the ground up**, ensuring that flexibility doesn't turn into a free-for-all.

But how does composability play out in practice? Let's take a look at the two pillars of digital experience – content and data – and see how adopting a composable, people-centered approach optimizes the experience across the board.





**SECTION 03**

**CONTENT:  
THE CORE OF  
CUSTOMER  
EXPERIENCE**





## THE LEGACY MODEL: HEAVY ON DEVELOPMENT

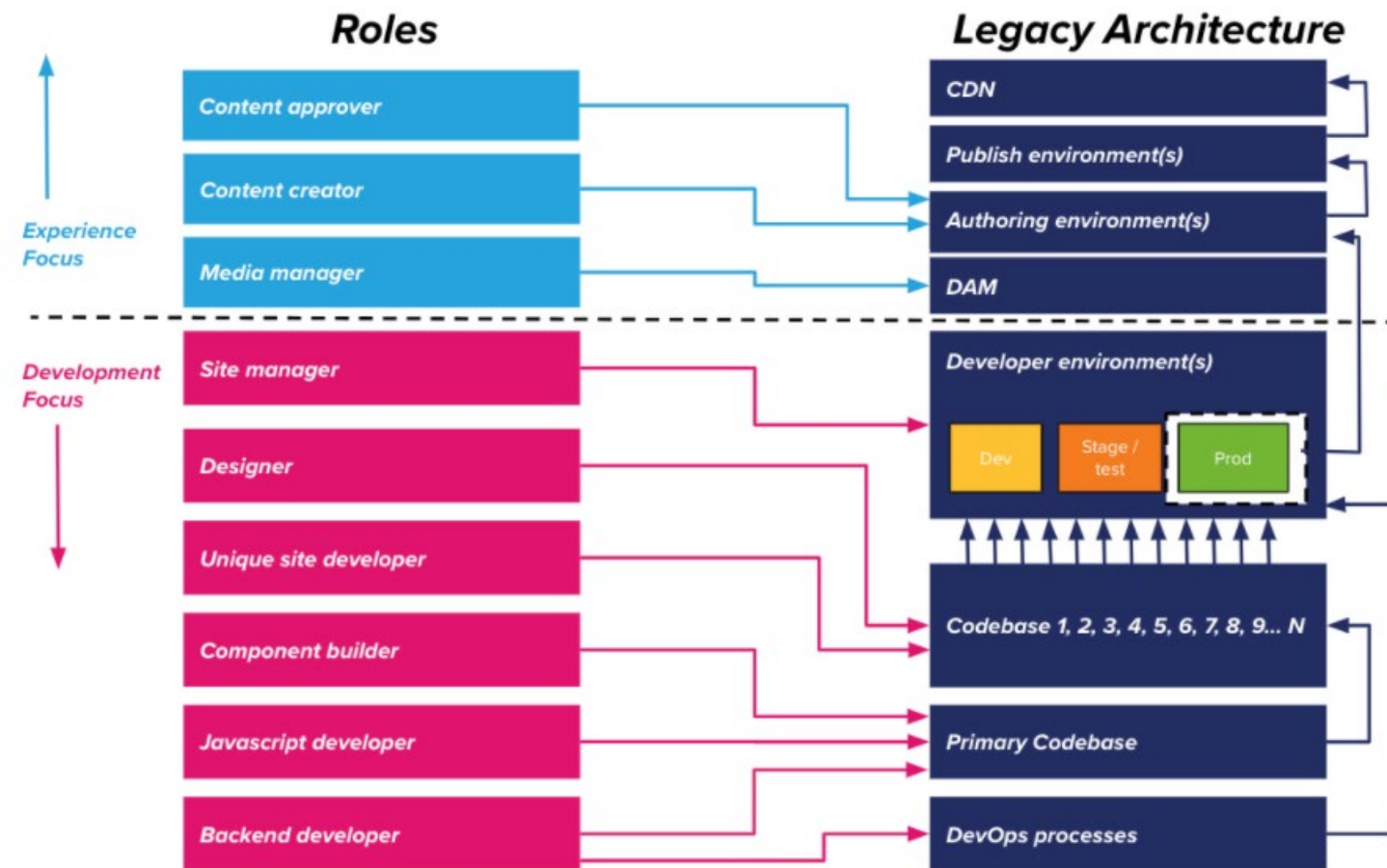
When customers interact with your brand, content is central to that interaction.

Unfortunately, legacy architectures don't treat content that way. Consider the traditional content lifecycle, including all the people, workflows and legacy technologies involved. You will notice a strange asymmetry. Although the focus of content creation and content delivery should fall on the intended experience, the process itself focuses primarily on development.

This system, if you can call it that, is broken. It is plagued by inefficient processes, inadequate tools and rampant complexity.

Business users oversee experience creation, but their ability to deploy content or update it is severely limited. Since, the experience and the underlying code are intertwined, they must be controlled and deployed together.

When developers ultimately create and deploy experiences, however, testing and deployment processes undercut overall velocity. Codebase sprawl adds to the drag, making governance a constant challenge. And everything gets worse as you scale.

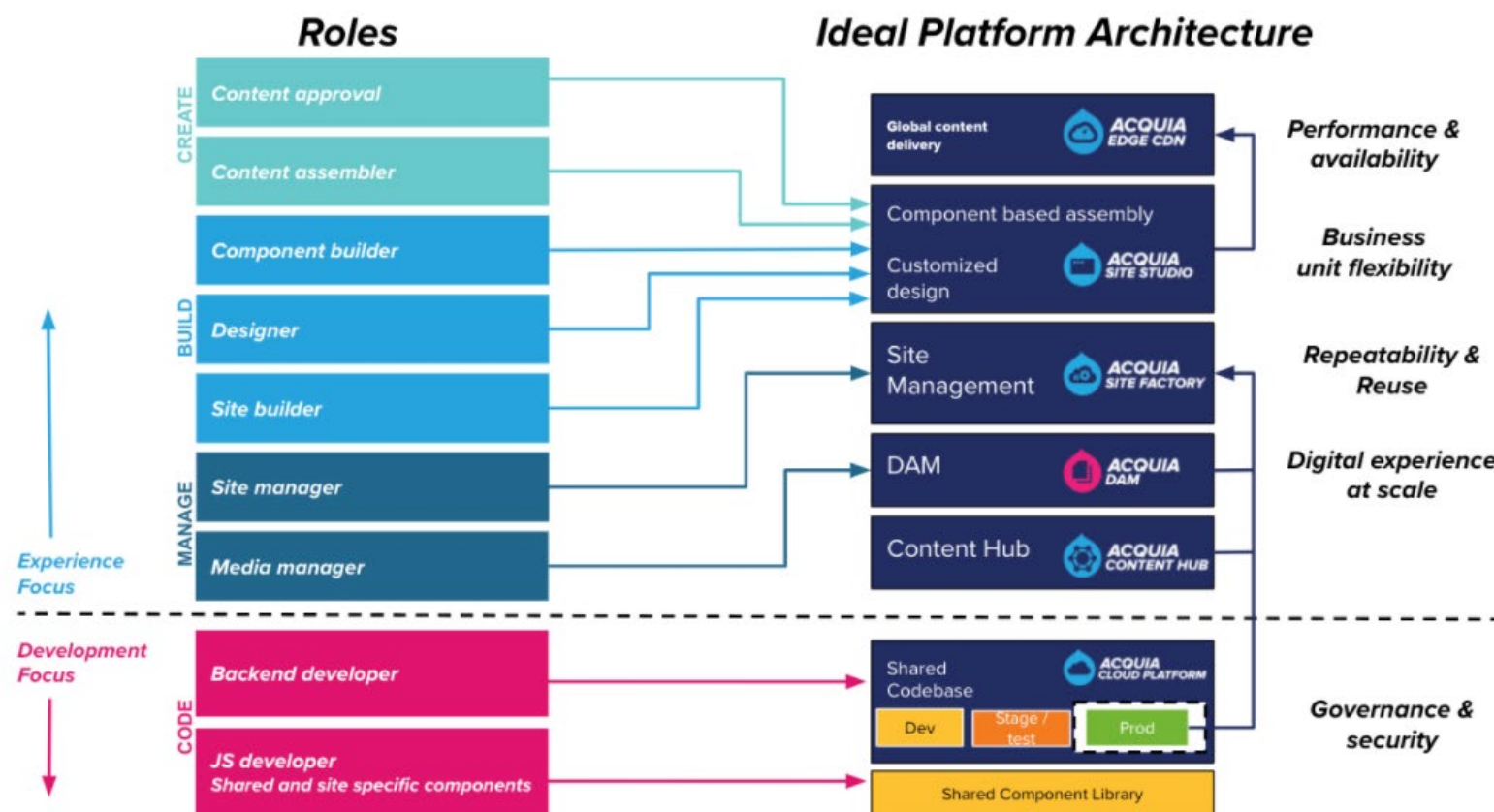


In this environment, no one can innovate. Content creators lack the tools to create novel experiences and struggle with the sluggishness of experience creation. Developers find themselves in a perpetual support cycle while IT teams wrestle with securing and enforcing governance across an increasingly complex architecture. Everyone loses.

### WHAT'S THE ALTERNATIVE?

As discussed above, the enterprise architecture must optimize experience, starting with the customer experience. This calls for shifting the focus of the entire process to experience creation and replacing legacy systems with a composable, component-based architecture.

In this new world, business owners control presentation and **everyone works with packaged business capabilities** designed to meet their requirements. Development focuses on streamlining the user experience. Standardization at every level supports scale.





Here, the asymmetry we saw above is reversed. By making experiences composable, content creators can develop and deploy content, orchestrating its presentation with no-code tools. In turn, developers can leverage low-code methods to build the tools that content creators use.

On the back-end, a rational, component-based architecture offers the kind of scalability that supports performance, stability, governance and security.

Moving from a legacy architecture to a composable architecture creates a virtuous circle in which design, development and deploy workflows reinforce each other. The result is continuous innovation and, more importantly, an optimal customer experience supported by an optimal employee experience.





**SECTION 04**

**DATA: THE KEY  
TO EXPERIENCE  
OPTIMIZATION**



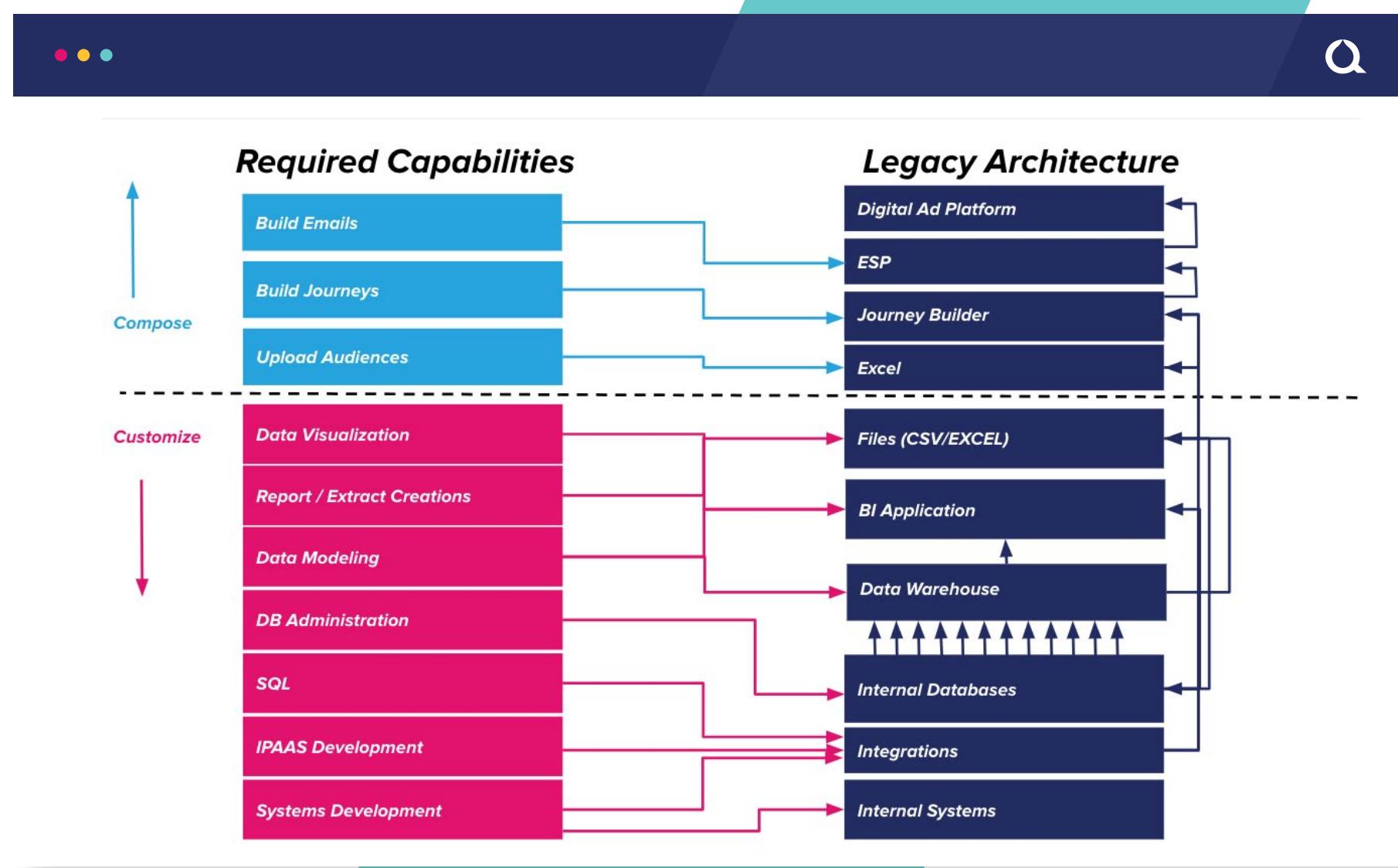


## THE LEGACY MODEL: INEFFICIENCY AND CONSTRAINTS

Customers expect seamless personalization in their experience with brands. Personalization makes these experiences relevant, engaging and convenient. Without data-driven insight into customer segments and individual customer behaviors, designing and delivering personalized experiences is impossible.

Even worse, without access to data in real time, experiences can't actually be personalized at all. Naturally, when we look at data and insight workflows in legacy architectures, they are as broken as the legacy content workflows above.

Again, we find the same imbalance encountered above. Just as developers controlled the deployment of content there, here IT and analytics resources control access to data. As a result, data cannot be effectively operationalized, meaning business users can't effectively leverage it. The customer experience suffers.





## WHAT'S THE ALTERNATIVE?

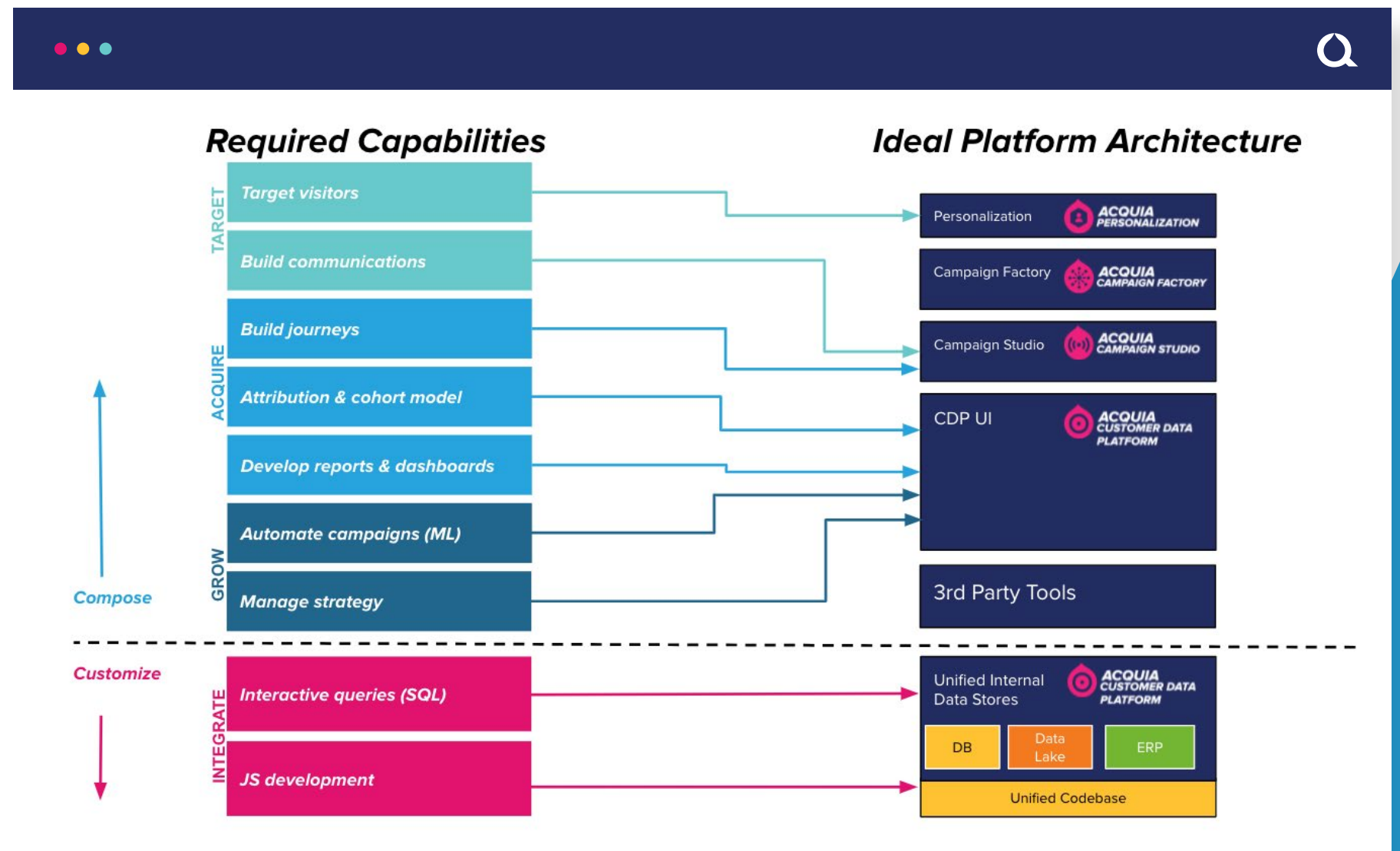
When considering the alternative to this legacy approach, it's important to recall the people-centric perspective we started with. The guiding principle can be summed up like this:

### People create. Machines optimize.

Your enterprise architecture should make it possible for people to conceive and design new experiences, using data wherever needed to architect targeted marketing campaigns and build relevant customer journeys. It should also enable the machines to personalize these campaigns, journeys and experiences at scale (something no person could possibly do).

With this goal in mind, here's what the ideal data and insight platform should look like.

Priority goes to the people creating and managing digital experiences, on the website and across campaigns. Business users enjoy direct access to personalization and marketing automation tools, including configurable machine learning models. Allowing these users to work with data more easily frees up data science teams to build and optimize data tools.



At the same time, developer and IT teams can focus on data integration, data management and data security. This not only ensures consistent and secure personalization at scale, it also means that the entire system becomes more efficient and powerful over time.



**SECTION 05**

**COMPOSABILITY  
AND GOVERNANCE**





## Flexibility doesn't mean loss of control

As we suggested above, flexibility doesn't help your organization if it exposes you to security risks, makes it more difficult to maintain compliance with data privacy laws or creates a Wild West approach to brand standards. That's why, as we also noted, the flexibility provided by a composable, component-based architecture has security and governance built in from the outset.

**Two things can introduce vulnerabilities into your enterprise architecture. The first is complexity.**

The more complex and unwieldy the architecture, the more difficult it is to secure. When this architecture relies on numerous solutions stitched together with a tangled web of custom code, maintenance, bug fixes and updates become never-ending tasks.

**A poor user experience is the other factor that creates vulnerabilities.**

When legacy architecture constrains users, either by limiting the tools they can use or by forcing them to use tools or processes that are slow and cumbersome, they can go rogue. This gives rise to what IT professionals call "Shadow IT," where employees use unsanctioned resources without IT's knowledge.

Aside from the costs associated with Shadow IT, it is by its very nature insecure. After all, the security team can't secure what it can't see.

Composability addresses both of these issues. By simplifying and standardizing the underlying system, it makes it more governable and secure.

At the same time, by using this composable platform to provide business users efficient, no-code tools, the enterprise gives people what they need without surrendering control. The components used by your developers engineer security and governance right into the tools themselves.

In other words, composability represents the perfect union of flexibility and control.

The flexibility and control offered by composability also extends to data protection, enabling better data stewardship as companies grow across geographical regions, expand across multiple brands and engage customers across diverse channels. Your data architecture must be able to grow and evolve with your company, ensuring that data privacy is consistently maintained no matter what ultimate form the business takes.

Composability supports this kind of growth and evolution.



**SECTION 06**

# **COMPOSABILITY IN ACTION**





## Your enterprise architecture should drive innovation. Not limit it.

The composable enterprise isn't just a thought experiment or an analyst's fever dream. Creating it has real, tangible benefits. Here are two examples of composability in action.

### **DEMOCRATIZING DATA FOR COMPOSABLE ENGAGEMENT**

J.Crew needed to be able to quickly take action on customer insights both in-store and online. Its previous marketing service provider (MSP) couldn't deliver. This meant the company couldn't be agile in their marketing efforts or maximize customer lifetime value across brands.

J.Crew had worked with its MSP for years, but the relationship resembled the legacy data and insight architecture discussed earlier. Essential data remained siloed. The marketing team needed support from business analysts who alone could pull lists and custom queries. Customer support lacked insight into customers' purchase history or lifetime value. Discounts couldn't be tailored to customers based on past

behavior. Transactional data wasn't synthesized quickly enough to be useful. J.Crew needed a change.

By standardizing on Acquia CDP, an inherently composable data solution, J.Crew got the agility and flexibility they sought. Daily updates of all customer and engagement data, including all summary calculations and machine learning scores, allowed them to quickly and effectively respond to customers' behaviors.

Data quality and data accessibility improved significantly. The call center could rely on accurate data in customer interactions and J.Crew's analysts now had query access to all, deduped up-to-date data.

Best of all, J.Crew's marketing teams were now empowered to autonomously create complex audiences — including optional sub-segments and A/B tests — and deploy them across marketing execution systems. Marketing became self-reliant and J.Crew infinitely agile. Teams could now have an idea and, within 30 minutes, identify and pull the audience. It's that simple.

What's more, the results are real. Better segmentation and targeting has led to increases in opens and click rates as well as in conversions and average order value. And it was the shift to a composable data architecture that made it all possible. (Read the whole story [here](#).)



## STREAMLINING THE DEMO PROCESS TO EMPOWER SALES

At Acquia, setting up demo sites for sales conversations used to be a complex, development-heavy process. To create a demo, devs ran scripts and went through an arduous configuration process. One glitch along the way could derail the whole thing.

Ironically, while the demo team knew it needed UX resources to improve the overall process and better serve the sales organization, it could never get the budget. Building demos consumed all the budget they had.

Fast-forward to the composable present.

We created a “demo factory.” Rather than running scripts to create demos, the demo team built tools allowing sales engineers to build the demo applications themselves. This shift in how developers spend their time let us consolidate the team, actually freeing up resources to focus on optimizing the user experience for the end user.

Putting it another way: A composable approach allowed us to invest in optimizing the business user experience, rather than simply devoting resources to building things on behalf of business users.

The screenshot shows the 'Create a new site' interface in the Acquia Site Factory. The header includes the Acquia Site Factory logo, navigation links for 'SITES', 'USERS', and 'ADMINISTRATION', and a 'HELP' link. The main content area is titled 'Create a new site' and contains the following sections:

- Site name**: A section for entering the site name and URL.
- Site URL:** A text input field containing 'newsites.demo.acsitemfactory.com' with a green checkmark icon to its right.
- After your website is created you can add your own custom domain, such as example.com.**
- Select an installation profile**: A section with a note: 'This is a one time installation. You will not be able to change profile once the site is created. [Learn more.](#)'
- Table of Installation Profiles:**

INSTALLATION PROFILE	DESCRIPTION
<input checked="" type="radio"/> acms_commerce	B2C - Create a commerce enabled site with sample content and products. (Acquia CMS)
<input type="radio"/> acms_business	B2B - Create a standard business site with sample content and DXP integrations. (Acquia CMS)
<input type="radio"/> acms_simple	Simple - Create a basic site using Drupal core. (Drupal 9)
<input type="radio"/> acms_custom	Custom - Create a custom site using the basic starter kit. (Acquia CMS)
<input type="radio"/> acms_decoupled	Decoupled - Create a decoupled CMS using the standard content types with JSONAPI and GraphQL support. (Acquia CMS)

At the bottom of the form is a blue button labeled 'CREATE SITE'.



**SECTION 07**

**ACQUIA: POWERING  
THE COMPOSABLE  
ENTERPRISE**





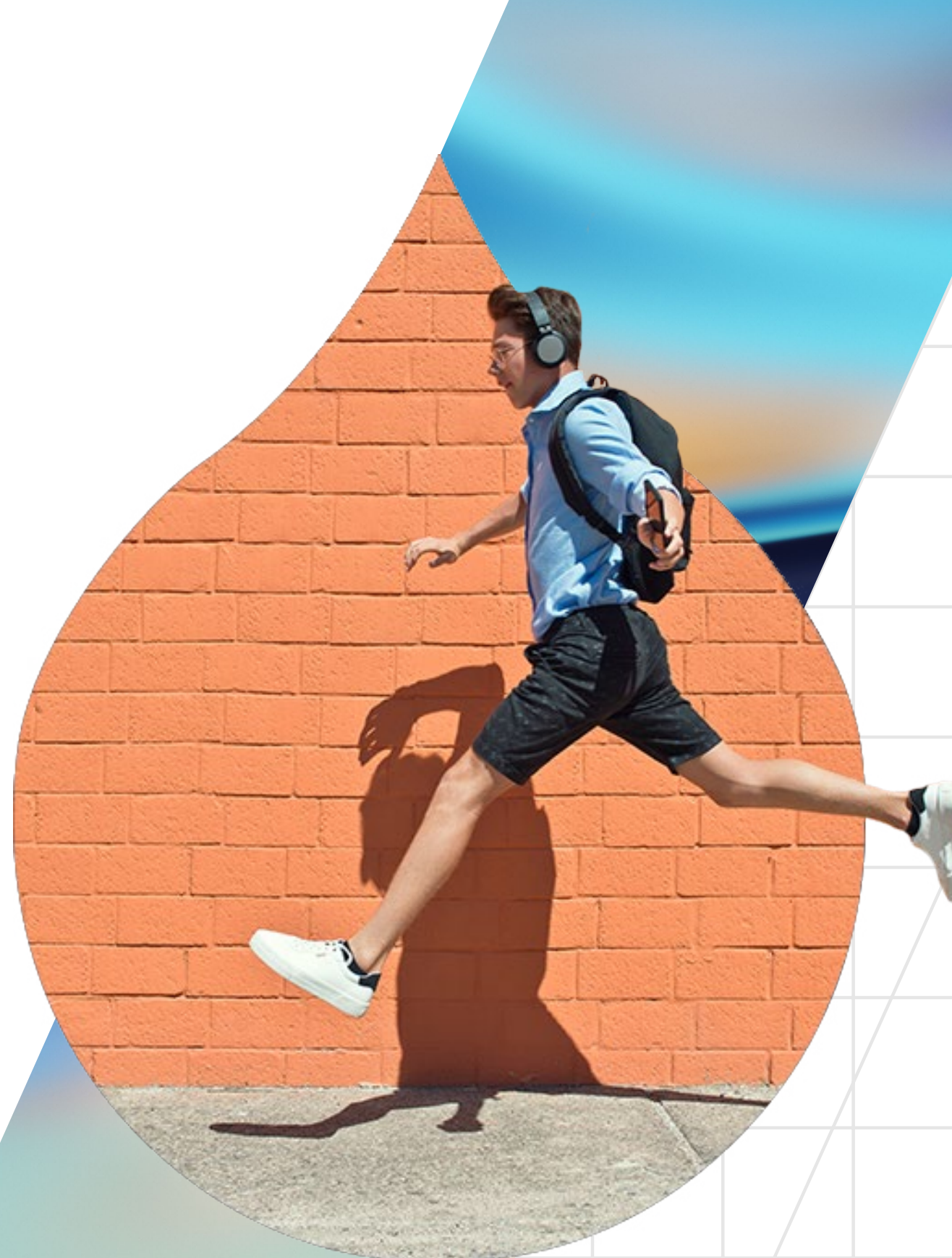
## **AGILITY, FLEXIBILITY AND SCALE**

The composable enterprise is people-centered. It allows you to optimize experiences for the people who matter most: your customers and employees.

A composable architecture gives you the flexibility and adaptability you need at the experience layer by standardizing things at the component layer. This standardization not only facilitates comprehensive governance and security. It also provides the visibility needed to tie content and experience back to ROI.

Acquia Drupal Cloud gives you everything you need to design and construct a composable architecture for the enterprise. Acquia Marketing Cloud gives marketers and business users the tools they need to design and implement a composable engagement model.

Acquia's Digital Experience Platform, by bringing Drupal Cloud and Marketing Cloud together, provides the foundation for a composable approach to customer and employee experience. It gets you over the innovation gap and makes it possible to deliver experiences that drive long-term engagement and lifetime customers.





# ***TRANSFORM YOUR BUSINESS***

Find out how Acquia can help you build a composable enterprise.

**LEARN MORE ▶**



# Acquia

ACQUIA.COM

## **ABOUT ACQUIA**

Acquia is the open digital experience platform that enables organizations to build, host, analyze and communicate with their customers at scale through websites and digital applications. As the trusted open source leader, we use adaptive intelligence to produce better business outcomes for CX leaders.

