How Lightning Accelerates Your Entire Business

Inside the world's #1 enterprise
cloud platform

salesforce

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Meet the fun way to learn more about Salesforce.
Check out Trailhead, where Astro and friends are ready to guide you through all things Salesforce (including Lightning).

Find your path forward at **salesforce.com/trailhead**.

Introduction

The Need for Speed

As the rate of change in business increases and competition becomes more and more intense, every company needs to find ways to move faster. The common element in every success story these days is how trailblazing leaders are speeding ahead by using apps to be more agile, automate processes, and accelerate productivity across the enterprise.

That means every business today is in the apps business – or should be.

Exponential growth in the demand for apps has created a growing backlog in IT departments. To get ahead of the curve, every organization has to find a way to deliver better, more connected apps, faster.

Whether large or small, high tech or low tech, every kind of organization needs to focus on creating engaging, beautiful apps.

Lightning Platform

The Lightning platform is the UI service of Salesforce that gives you all the tools you need to deliver modern apps – and a beautiful user experience on any screen – faster than ever. Lightning enables a new app delivery continuum that brings together developers and admins to collaborate. Now you can design apps to work uniquely on your phone, tablet, laptop, and desktop – all from one place, and all while maintaining the flexibility to extend your apps with custom-coded Lightning Components for the best of both worlds.

The Lightning platform helps IT become more agile to meet business demands faster and become a true partner in driving business forward. It also creates an environment that helps IT manage it all at the pace of business.

The ROI of Lightning

Transform Your Business – and Your Bottom Line

Lightning brings different groups of users together in a way that no other platform does. Instead of the typical slow development cycle – building the app, bringing it to the admin/ end user, getting feedback, and then iterating – developers can now build Lightning Components that admins assemble into apps.

A recent IDC white paper* found organizations are deriving value from more timely, functional, and robust business applications. IDC projects that organizations using Salesforce for app development will realize business benefits worth an annual average of $242,272 per 100 users:

• Generating more revenue by addressing business opportunities with more tailored business applications in less time

• Driving higher user productivity through earlier delivery of high-performing business applications that leverage business data

• Increasing the productivity of application development teams by providing an easy-to-use, robust development platform

• Optimizing the use of IT staff time and IT infrastructure by using the cloud-based Salesforce platform as a service

Business Value of Salesforce

478%
five-year ROI

7 month
breakeven point

$242,272 in business
benefits per 100 users per year

50% faster
application development lifecycle

59% less time
to release new application or feature

$55,100
of additional revenue per year per 100 users

38% more efficient
IT infrastructure management

44% more new apps
developed per year

*Read the full IDC white paper at
salesforce.com/idc-roi-apps

What Powers Lightning

Force.com Runtime Services

Traditionally, setting up the underlying runtime services for your apps can be a time-consuming endeavor, not to mention maintaining those services through upgrades and expanding app requirements.

But with the Salesforce Platform, all of the app services come right out of the box, from a powerful workflow engine to API services, integration services, authentication, event log framework, analytics, collaboration services, and all of the other powerful services behind Salesforce's award-winning apps, trusted by hundreds of thousands of companies.

Workflow Engine	API Services	Integration Services	Mobile SDK	Authentication	Sharing and Permissions

Event Log Framework	Analytics Engine	Collaboration Services	Search	Files and Content Management	UI Framework

Metadata-Driven Architecture

The Salesforce Platform's unique architecture provides you with all of the benefits of a multitenancy model with a unique metadata-based approach to defining apps. The Salesforce multitenant model provides clear boundaries between the platform and the apps that run on it, eliminating the complexity and risk of an entire hardware and software stack that is maintained and managed for each app deployment.

And apps are defined not just by code, but with collections of metadata. Although apps have their own data objects, forms, layouts, and integrations, all customizations – schema, code, and app – are specified as metadata that decouples them from the runtime environment and services of the platform. Upgrades on everything from app servers to UI frameworks can be deployed seamlessly.

In fact, you get three automatic upgrades every year without the hassle of data migration – and your apps and customizations never break, whether they are custom apps or apps you've installed from our AppExchange marketplace. This effectively future-proofs the app foundation that IT builds on and with, and saves large amounts of money and resources. Everything – from the app server to the database, messaging, testing, version dependency, security patches, code frameworks, and more – is taken care of automatically.

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3x
upgrades per year

120 million
tests per upgrade

1 common view
of data

APPS
Web, Mobile, Wearable
Drag and Drop, Elastic, Event-Driven

SERVICES

SPAN OF DEV TOOLS
Lightning, Mobile SDK, Polyglot Buildpacks

ECOSYSTEM
• AppExchange Apps
• Components
• Add-ons

ENHANCED SECURITY	**RUNTIME FEATURES**	**DEVELOPER EXPERIENCE**
Encryption, Event Monitoring, Transaction Security	Reports, Dashboards, Workflow, Analytics	Appl. Lifecycle Mgmt., CI/CD, Auto Deploy

EXTERNAL BUSINESS DATA SOURCES

INTEGRATION

CLOUD APPS
O365, Workday, NetSuite

Salesforce Connect

LEGACY APPS
SAP, ERP, Oracle, EBS, SharePoint

AppExchange Connectors

Files Connect

ON-PREM CUSTOM APPS
.Net, Java

API

RUNTIMES

salesforce heroku   salesforce force.com   salesforce thunder

FOUNDATION

FEDERATED IDENTITY AND SECURITY CONTEXT

SHARED METADATA

GLOBAL NETWORK FABRIC AND VIRTUAL PRIVATE CLOUD

Customer Spotlight

CROSSMARK®

OneHub app connects the dots around shopper engagement.

For more than a century, CROSSMARK has helped retail companies, from consumer packaged goods manufacturers to big-box retailers, reach consumers anywhere along the shopping journey, from product discovery to purchase.

CROSSMARK is a global leader in merchandising brands, creating product awareness, and nurturing customer loyalty through in-store events, product promotions, and digital shopping experiences.

"Our business is all about creating connections," said CEO Steve Schuckenbrock. "As brands and retailers face the challenges of an increasingly complex global marketplace and wonderfully informed shoppers, their need to find new ways to connect with consumers is more pressing than ever. Our connections enable us to ensure the right products are on the right shelves at the right time, so that the shopper can enjoy a unique experience that helps our retail and manufacturer customers grow. We

inspire shoppers to make smart purchase decisions through engaging retailtainment and merchandising solutions."
A single platform could connect every facet of the business. As CROSSMARK gravitated toward the Salesforce platform, it started to see the benefits of creating a single platform for retailers, suppliers, and shopper experiences.

⚡ **The robust Salesforce platform frees up IT to innovate faster and speed up the entire business.**

For CROSSMARK, the Salesforce platform, with its open architecture and robust ecosystem support, has been the launchpad for business transformation.

"There are a lot of companies that claim to have a multitenant platform that is continually updated, but I have not seen a platform that matches Salesforce," said Mike Anderson, CIO. "When you combine that with Force.com and Heroku and the ability to integrate those two pieces, there's not an application I can think of that you can't build or extend using Salesforce."

⚡ **For CROSSMARK, the advantages of using Salesforce and Lightning have played out across the company.**

The new Lightning experience, with its point-and-click tools for app building and automating processes, has been a major advantage for the CROSSMARK team as it races to build apps

on tight timelines. "The two key things in Lightning that were really exciting to me were the ability to build workflow applications with a drag-and-drop feel versus writing custom code," said Anderson, "and the ability to write applications once and they run on any device, on any screen size."

Mobile apps built on the Salesforce1 Mobile App and Heroku have also proven transformative in a business where field reps are on the front lines, visiting retailers and working in stores. In the past, CROSSMARK staff members would go into a store with a clipboard, which meant that reports got filed and data processed days or weeks later. Today, data is collected on tablets and transmitted in real time so decisions can be made almost instantly.

Custom apps built on Heroku deliver rich, engaging consumer-facing applications. "One of the exciting things about Heroku is the ability to leverage the latest and greatest open-source technologies that developers really want," said Anderson. "On top of that, I can integrate directly into Force.com with Heroku Connect and send data back and forth. It creates limitless possibilities."

That speed has allowed CROSSMARK to effectively collapse shadow IT efforts and consolidate development on Salesforce. "CROSSMARK is seen as an innovator in our industry," said Anderson, "and innovative companies use Salesforce."

Want to learn about the apps CROSSMARK and 38 other industry leaders have built? **Check out** *The Trailblazer's Guide to Apps* **to learn more.**
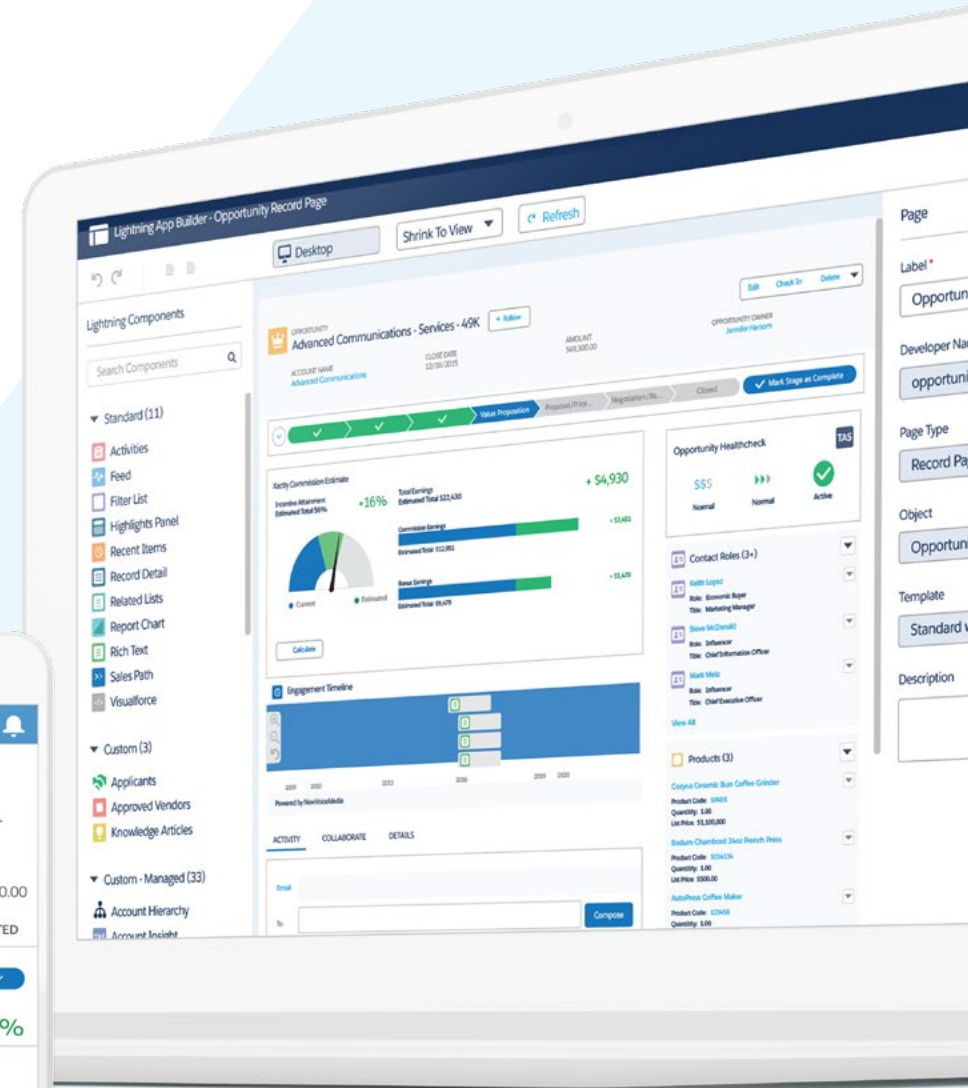
Lightning Essentials

Lightning gives you the tools you need to build in a flash. Whether you are building mobile apps, customizing pages, or building customer communities, you can drag and drop components to deliver modern user experiences on any screen.

Lightning App Builder

Assemble apps in a flash and customize pages faster with with a library of easily configurable drag-and-drop components.

• Build custom mobile apps with responsive design for any business process.

• Leverage templates and forms for quick deployment.

• Preview apps as you build and optimize iteratively.
  ○ Build the perfect app for tablet, phone, and desktops, with layouts that are optimized automatically.

• Get more components ready for use in Lightning App Builder from Lightning Exchange built by Salesforce partners and Salesforce Labs.
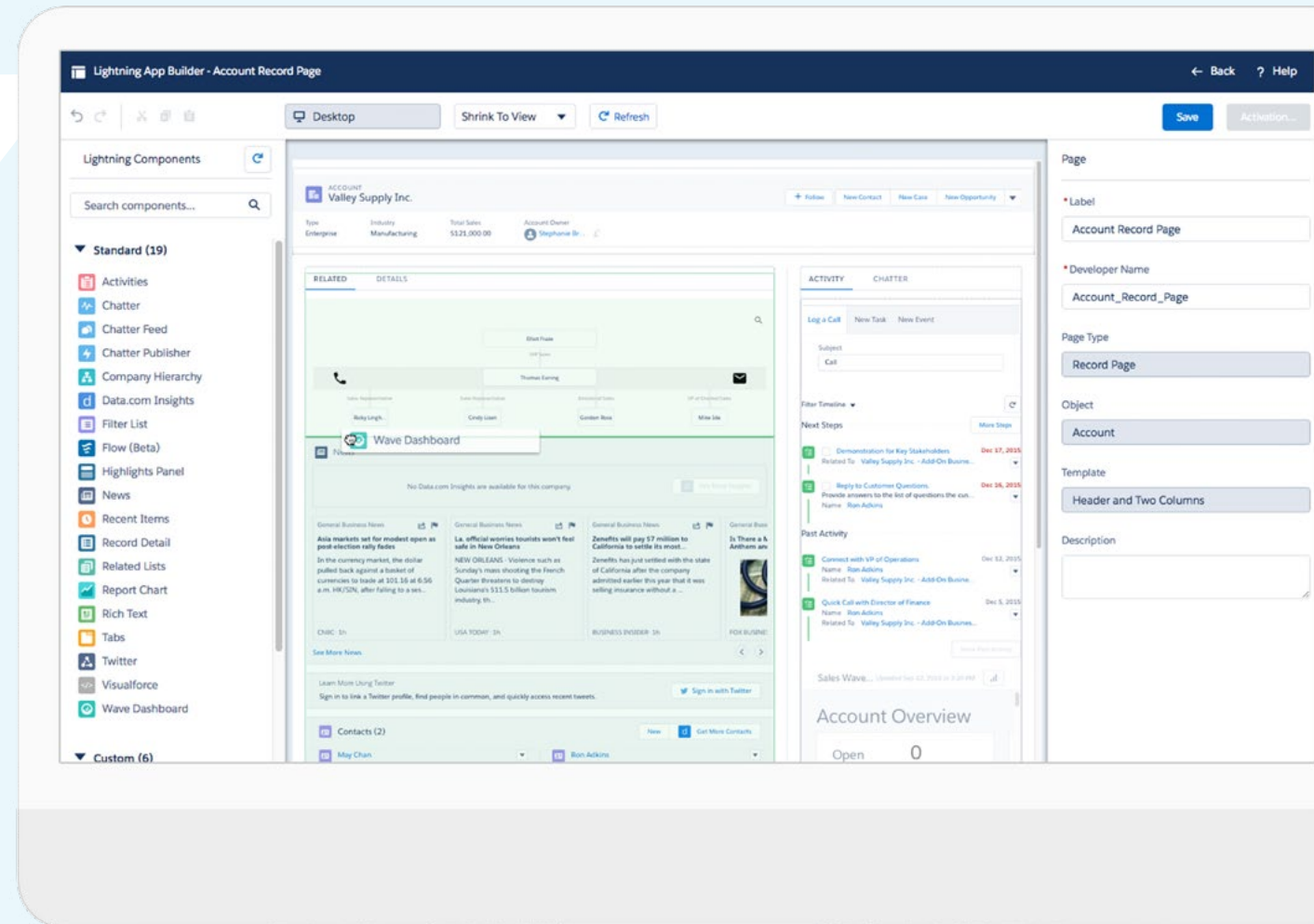
Lightning Components

Why build from scratch every time? Lightning Components are modular, self-contained, reusable building blocks that speed up app development. Lightning Components bridge the gap between business and IT, enabling a whole new class of citizen developers.

⚡ **Developers can focus on doing what they love – solving hard problems and having far less repetitive work.**

Business analysts can now be directly involved in the development process, give fast feedback, and assemble apps that are a better fit for the purpose.

- Assemble apps and pages with self-contained building blocks with HTML, JavaScript, and CSS

- Build responsive components for any device with drag-and-drop tools on an open, multitier framework

- Scale development by sharing and reusing components to build apps faster

- Build better-performing apps with reduced server trips via client-side caching and shared transport layer

- The out-of-the-box UI components set kick-starts your app building, plus developers can build custom components

Want to go hands on with Components?
Take the Trailhead module here.
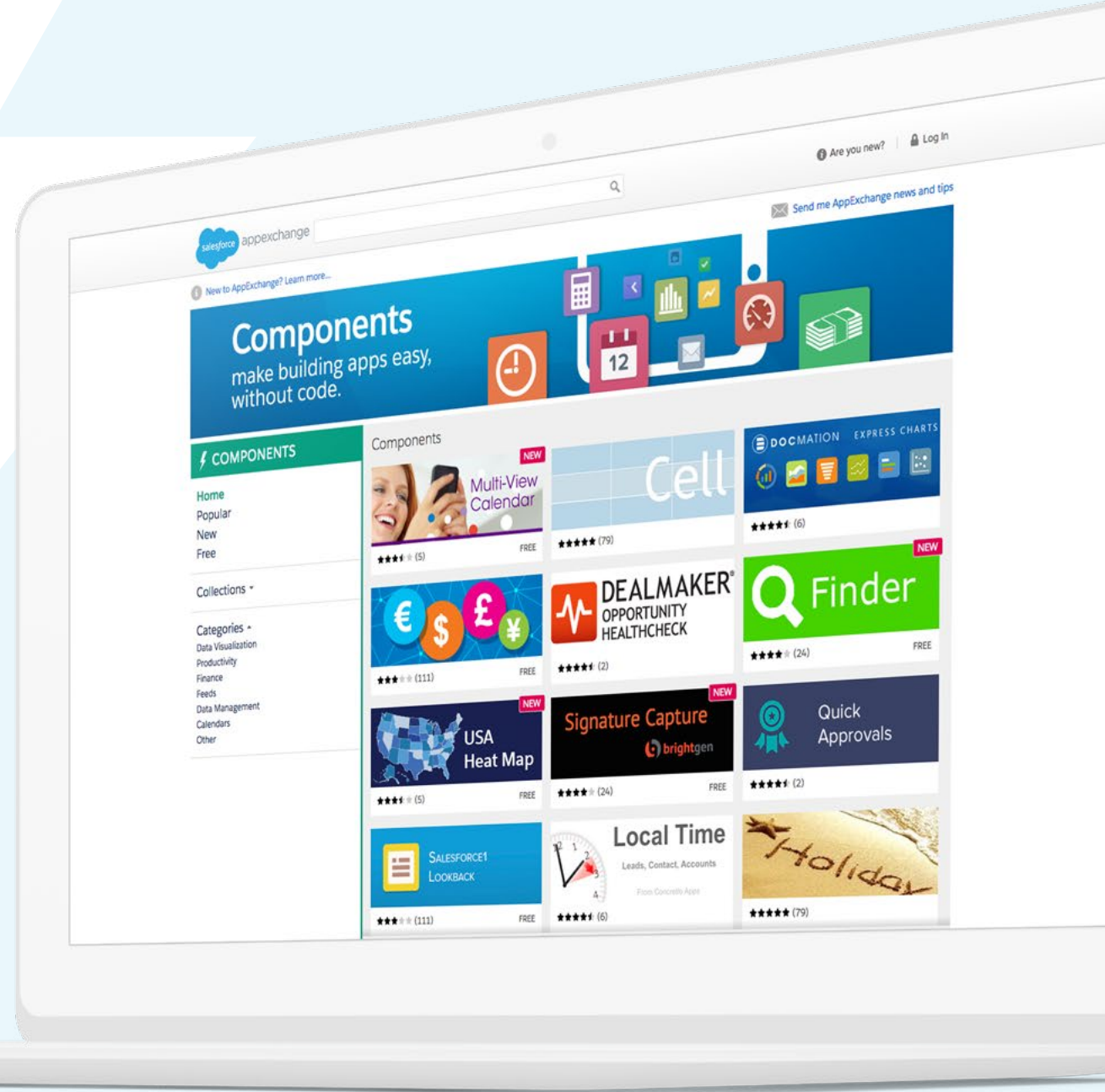
Lightning Exchange

All the components you need in one convenient place. Located inside Salesforce AppExchange, Lightning Exchange features Lightning Components built by partners and by our internal developers through Salesforce Labs.

• Get all the prebuilt components you need in one place

• Use Lightning Components that are interoperable out of the box and can be shared easily with packaging, saving you development, debugging, and maintenance time

⯈ Want to install and configure AppExchange components in minutes? **Take the Trailhead module here**.

Find the online store at **salesforce.com/appexchange**.
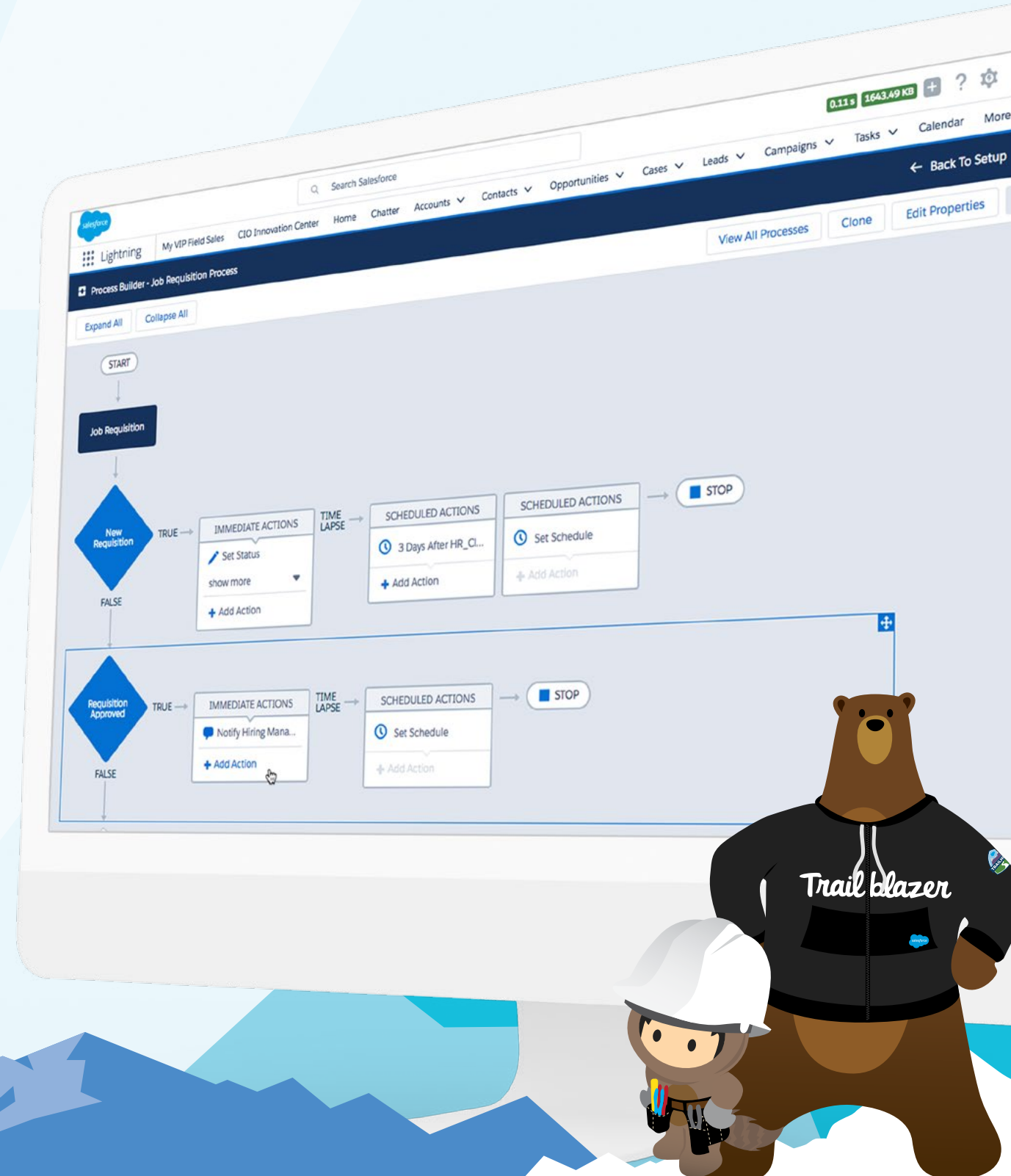
Lightning Process Builder

Lightning Process Builder is the most powerful process designer for enterprises. Process Builder allows you to drag and drop process criteria to visualize your business actions. With no need for code, anyone can build business workflows and visually automate complex processes in minutes.

Process Builder provides users with the flexibility to respond to changing business needs fast and take action – whether it's creating a new record, posting to Chatter, or sending notifications. You can also schedule actions with multiple schedules, scale to handle records in bulk, and deploy once across every device to increase overall employee productivity across your business.

With Process Builder you can:
- Easily automate complex business processes with point-and-click tools
- Automatically update or create new records, emails, and tasks, or submit approval requests in a few simple steps
- Visualize the entire process in one place to design and collaborate directly with line-of-business owners
- Easily extend processes with flows
- Deploy workflow once, across every device

Want to learn to use Salesforce Process Automation?
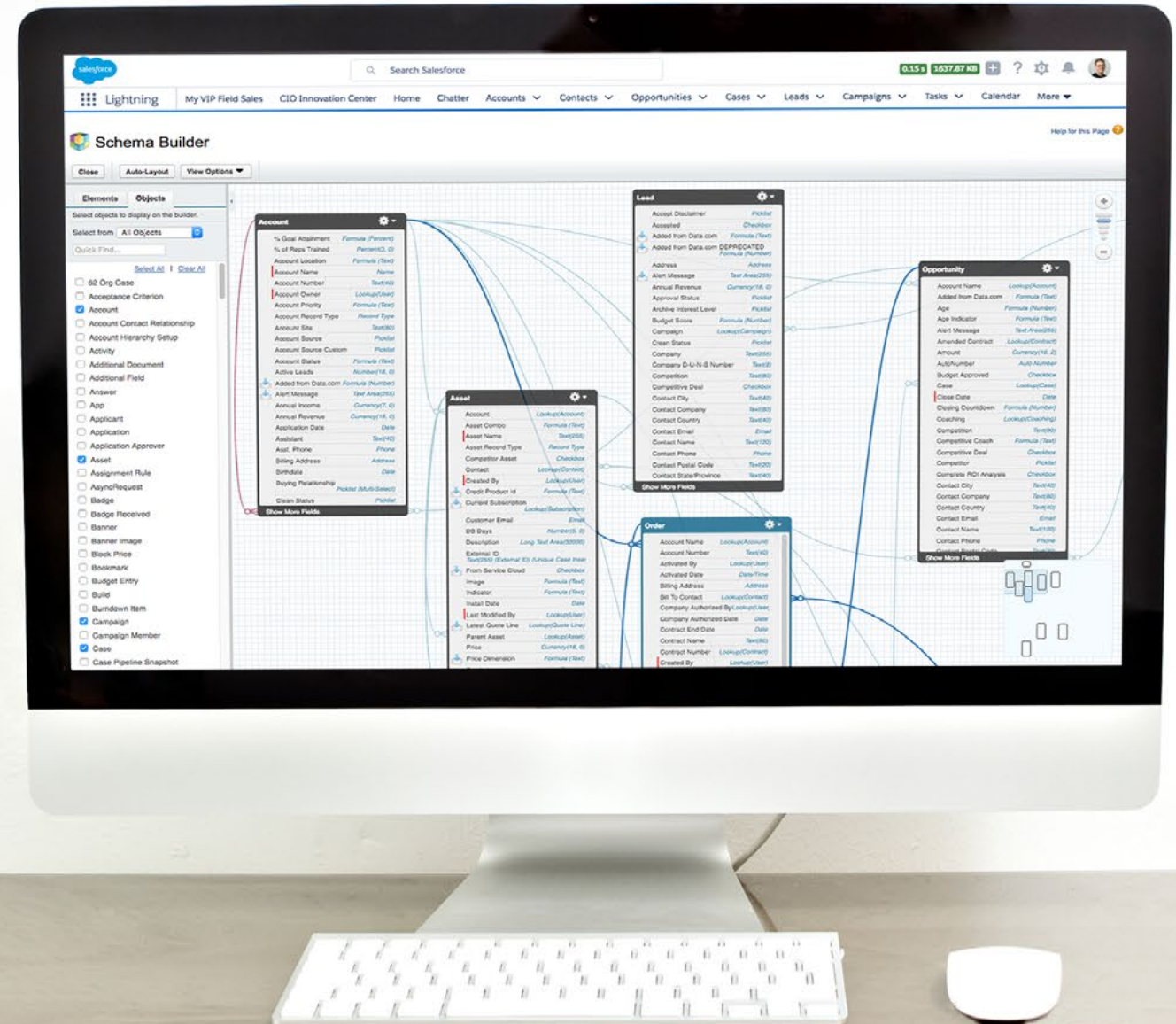**Build your first process here**.

Schema Builder

Data modeling used to be complex and time intensive. No longer. Schema Builder is a visual environment where you can see all your Salesforce data objects, custom fields, and relationships in a graphical way. Schema Builder vastly simplifies designing, implementing, and modifying your schema or data model, across all of the objects and relationships in your app.
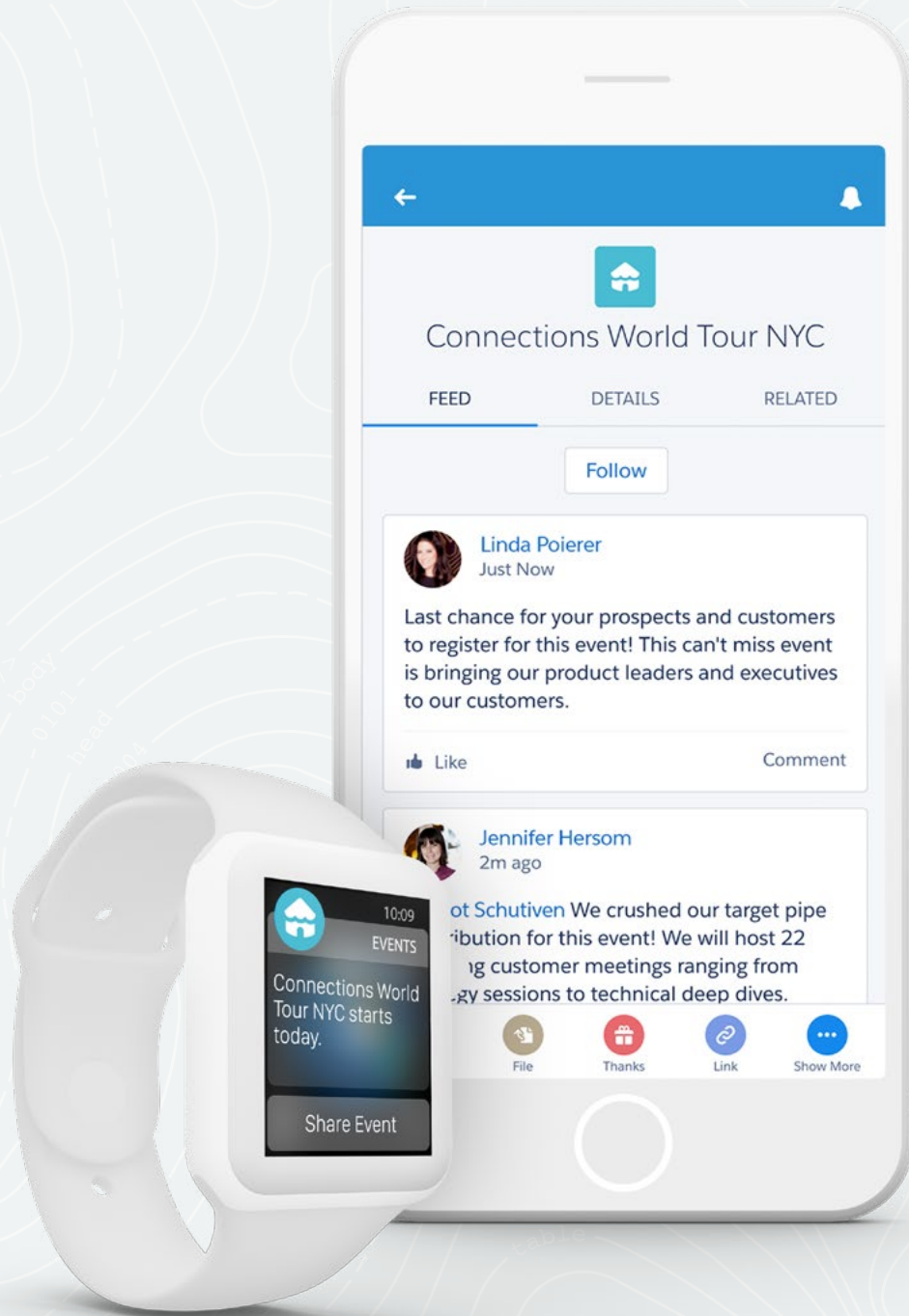
You can view details such as the field values, required fields, and how objects are related with lookup and master-detail relationships for both standard and custom objects.

In addition, you can easily create and modify objects, fields, and relationships with point-and-click ease. As you drag objects around the canvas, Schema Builder automatically implements the changes and saves the layout of your schema, drastically improving the speed of configuring the data model and viewing the relationships.

⚡ **With Schema Builder, you spend less time setting up your data model and more time building the apps users love.**

⚐ Want to learn to give your data structure with fields, objects, and relationships? **Try the Trailhead module here**.

A Platform for Creating Communities

Unleash the Power of Social Collaboration

With the social collaboration built into the Salesforce Platform, not only are your users social, but so is every record, every case, every opportunity, every page, and every app. In fact, with just a few clicks, the Salesforce Platform lets you build the power of social collaboration into any app that you create – instantly.

Feeds
Keep up with your critical projects, topics, and teams. Work together on sales opportunities, service cases, and marketing campaigns. Capture organizational knowledge in a single location.

Action Bar
Create instant actions for any business process: expense reports, support cases, orders, and more. Customize actions, enable approvals, add polls, share dashboards and reports, and even integrate third-party apps.

Files
Secure, social, and mobile file sharing puts files in the context of business processes. You can always find what you need, fast, and discover valuable resources you didn't even know about.

Social Intelligence
Get recommendations for relevant people, files, and information to follow based on your activity and interests. Plus, search and track any topic to quickly find information and identify experts.

Custom Communities Made Easy

With Lightning Community Builder, quickly build a custom community with a seamless, branded experience that's integrated with your content, data, and business processes. Reimagine every customer touchpoint – from sales and service to your distribution channels and supplier network – as an opportunity to provide an engaging experience. Connect to partners to sell more effectively, to agencies to work more efficiently, and to employees to drive productivity and innovation.
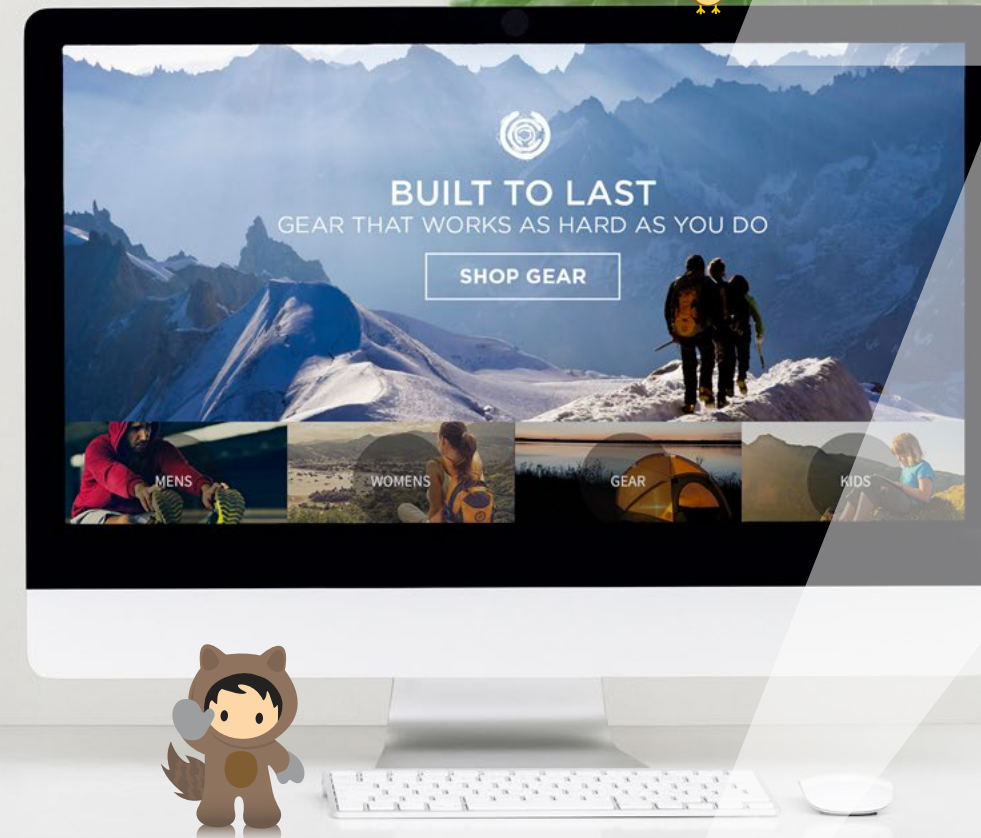
• Build, publish, and maintain communities with prebuilt templates that work on any device

• Rapidly set up and streamline access with single sign-on and identity

• Drag and drop custom and third-party Lightning Components to create an experience optimized for any screen

⚐ Want to build incredible customer experiences with Community Builder? **Take the Trailhead module here**.

Lightning Bolt

Lightning Bolt makes it easy to create and export industry-specific solutions and use them to jump-start new communities, or package and distribute them for others to use. Save time by building once, then reusing. Whether it's for your own org or you're a consulting partner or ISV, you can reduce the time required to build communities and cut development costs.

Many of Salesforce's leading partners, including Accenture, Deloitte, and PwC, have already developed Lightning Bolt solutions that will be available on AppExchange.

Lightning Design System

Better Practices, Better Apps

Lightning Design System makes it easy for you to build apps using the latest enterprise UX best practices, and give them the Lightning look and feel.

- Save development time and easily create modern, consistent apps with a collection of design patterns, components, and enterprise UX best practices

- Develop apps that are seamlessly unified with the Salesforce user experience

- Keep an updated look across Salesforce releases by simply updating design tokens to roll out the new styles without manually updating code

Want to build pixel-perfect apps using our design guidelines and CSS framework? **Take the Trailhead module here.**

Find the online store at **lightningdesignsystem.com**.

Make Every App Mobile with Lightning

Mobile App Development Platform

Harness the power of the world's best mobile app development platform – and deploy truly mobile apps faster than ever. The Salesforce Platform allows every app you build to instantly be mobile, while still allowing you to customize the app for your different devices. Your team can focus on user experiences, not the infrastructure and development burden that slows the pace of innovation.

The Salesforce Platform streamlines your build process, with built-in feature sets.

This functionality is supported by the Salesforce Platform, which is itself a full mobile back end as a service (MBaaS) that makes app development easy with features including:

- Data management and storage
- Business processes
- Workflow capabilities
- Third-party integration
- Test, versioning, and release control

- A rich identity and security model
- Validation rules
- Analytics
- Mobile SDK

These built-in features mean that you can focus on creating your app without worrying about back-end infrastructure.
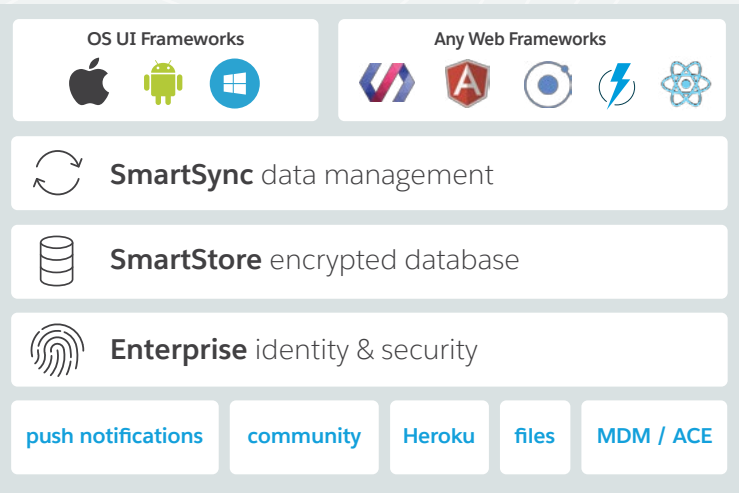
All custom apps built with the Salesforce Platform can be used as stand-alone apps, and are also accessible to employees in the Salesforce1 Mobile App.
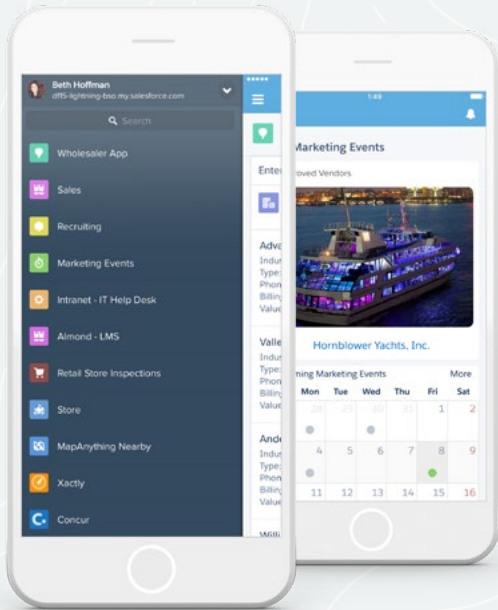
Salesforce SDK

The Salesforce Mobile SDK allows you unlimited flexibility in creating any app that leverages the full mobile back-end services. The SDK library supports critical features such as secure data access, offline storage, and data synchronization.

⚡ **Mobile SDK architecture lets developers use their favorite native and hybrid frameworks without compromising any feature.**

OS UI Frameworks

Any Web Frameworks

SmartSync data management

SmartStore encrypted database

Enterprise identity & security

| push notifications | community | Heroku | files | MDM / ACE |

A Closer Look at the Salesforce1 Mobile App

The Salesforce1 Mobile App is the ultimate business app, designed to help you run your business from your phone. The Salesforce1 Mobile App gives you the power of Salesforce, anywhere. Now your teams can collaborate and take action on the go. And you can extend and customize the power of Salesforce with the easy deployment of Salesforce1-ready mobile apps from AppExchange, and the Salesforce Platform's easy-to-use customization tools. Plus, any app you build in Force.com can be instantly mobile with just a tap.

With the power of MySalesforce1 your custom-branded, app can be available to everyone in the Google Play and iOS App Store. Leveraging your branding and look and feel while utilizing the Salesforce1 Mobile App framework allows for incredibly fast and agile development for any mobile device.

Download on the App Store **GET IT ON Google Play**

🚩 Want to get hands on with Salesforce1 and our SDK? Take these Trailhead modules: **Salesforce1** and **SDK**.

Lightning Reports and Dashboards

Answering the Demand for Analytics

One of the biggest challenges IT has faced over the last few years has been satisfying the demand for business analytics. With more and more customer information being shared and used by different teams for sales, service, marketing, product research and development, supply chain, and more, business stakeholders are naturally asking for more ways to look at – and work with – that data in real time.

Until now, that's been nearly impossible to deliver without purchasing expensive business intelligence software that's difficult to implement (and often hard to use) or dedicating a specific group of IT staff to develop a customer solution to help business stakeholders crunch numbers.

Lightning eliminates the need for all of that, delivering a flexible UI that allows business stakeholders to create personalized reports and dashboards with drag-and-drop simplicity. You can literally just drag and drop the fields, filters, groupings, and charts that you want, and get an immediate real-time view with instant drill down to operational data. Then you can share these insights via social feeds and across mobile devices. And since the data is all stored on our cloud database using a multitenant infrastructure, it's accessible with the security you can trust, on any device, anywhere in the world, on demand.

Want to visualize key business metrics in real time using Lightning Experience? **Try the Trailhead module here**.

Conclusion

Why the Salesforce Platform

The Salesforce Platform is the app-development platform for the customer era. It connects all of your data, networks, and identities across your entire organization so that you can build the connected experience that your customers expect. At the same time, you get the cloud infrastructure, compliance, and security customers have come to rely on from Salesforce.

When you build your whole business on the Salesforce Customer Success Platform, you can easily integrate sales, service, marketing, and IT with a single view of the customer across the organization.

> Now, instead of having silos, you get deep, rich data context so that you can create richer, more engaging apps that stand out from the crowd.

The Salesforce Platform also delivers a best-in-class development environment so you can create the apps customers, employees, and partners have come to expect – and the ones that will exceed even the highest expectations.

The Benefits of the Salesforce Platform

Fast App Development and Customization

Iterate and build faster because anyone in your company can build with clicks and code. This allows IT to deliver more rapid innovation to the business. Developers can build with the tools and languages that they love, and then scale their apps effortlessly with a high-performance platform for rapid growth.

Connected Experience

Build apps that have shared identity, network, and data so that they provide a single view of the customer. Every app is instantly mobile, and customers can build, deploy, and manage mobile apps for employees, customers, and partners, fast.

World's Most Trusted Enterprise Cloud

Deliver apps that are inherently secure, available, and high-performing, even to the most demanding customer's expectations. We reflect our values of transparency and trust in everything that we do.

Proven Success and Scale

Salesforce is the proven enterprise platform that powers not only Salesforce products, such as Sales Cloud, Service Cloud, Community Cloud, IoT Cloud, and AppExchange, but also processes over 4 billion transactions per day (50% via API)

and has over 5.5 million apps and over 2.6 million developers building on App Cloud. These developers can extend the power of Salesforce with apps and Lightning Components from AppExchange, the world's largest enterprise app store.

SALESFORCE CLOUD INFRASTRUCTURE BY THE NUMBERS

Always On
99.9%+ uptime

Speed
4 billion+ transactions a day with an average response time of less than 250 milliseconds

Innovation
5.5 million+ apps

Trust Built on Transparency
trust.salesforce.com

CONNECT TO YOUR CUSTOMERS
IN A WHOLE NEW WAY