



SERVICEPOWER WHITE PAPER

INTEGRATION WITH SERVICEPOWER





The API Economy

The Field Services industry is undertaking major Digital Transformation (DX) initiatives to drive tighter and faster alignment of IT with business. This alignment is important so that businesses gain many established advantages such as corporate agility, improved decision-making, faster time-to-market, improved customer experience etc. DX is nothing new, it is a common euphemism for modernization efforts: moving from legacy architectures, on-premises systems and waterfall development to microservices, the cloud and agile. DX creates digital channels for improving customer experiences to reach more customers using strategies structured around extensive internal and external interfaces we now as Application Programming Interface (API).

To sustain and thrive in the digital economy, companies must extensively leverage APIs as part of their core strategies. In many cases, API usage has crossed over from one domain to the other: starting with interfaces to structure internal systems and then offering those to a broader public. While APIs are technical constructs, it is important to understand that they are strategic assets, not tactical fixes, and therefore they must be aligned with the business strategy to reap their benefit and value.

“APIs are the building blocks of the digital economy. They make existing capabilities fungible, so that it is possible to use them in new ways, quickly and easily, thereby spurring innovation and new value creation.”

Laura Merling, VP Ecosystems and Solutions, AT&T, Price Waterhouse Coopers 2011

API's for Business

In the API economy, consumers and businesses increasingly depend on web and mobile apps for daily routines; however, businesses in particular are discovering that APIs can be leveraged to monetize previously isolated data sources. APIs are the essential tools that facilitate this by inspiring businesses to create new opportunities and improve existing products, systems, and operations.

For example, a field-service company could give its customers an app that lets service managers check for schedule availability for their area with the service company. This app could be expensive to develop, limited by platform, and require long development times and ongoing maintenance. Alternatively, the field-service company could simply provide an API to check service availability.

If implemented effectively, APIs simplify app development which can save developers time and the company's money. Also, when designing new tools and products—or managing existing ones—APIs give flexibility; simplify design, administration, and use; and provide opportunities for innovation. There are several benefits to this approach:

- » **Connect with Customers** - Letting customers access data via an API helps them aggregate information about available schedules in a single place. At the same time, the field service company can make changes to its internal systems without impacting customers, so long as the behavior of the API doesn't change.
- » **Streamline Operations** - With a publicly available API, developers working for the field service company, its partners or customers could develop an app to help customers find the specific solutions they're looking for. This could result in higher sales, customer retention and improved brand loyalty.



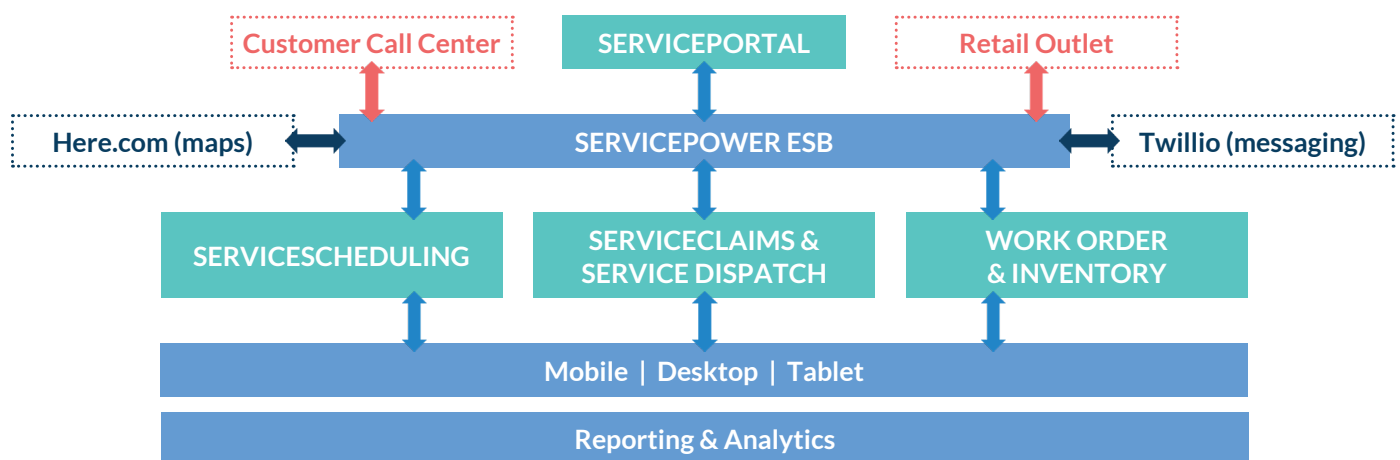
Architecture of the ServicePower API

ServicePower uses an API First Development Strategy. The API First Development is a strategy where developers build the API first and then builds the web or mobile applications on top of that API. This forces businesses to design an API and use it for their own app, so this becomes more “real world” and developer friendly API. Reality is that this is not a sequential set of activities but parallel. Build the API and web app together and keep on iterating. An API-first approach to building products provides many benefits, including but not limited to:

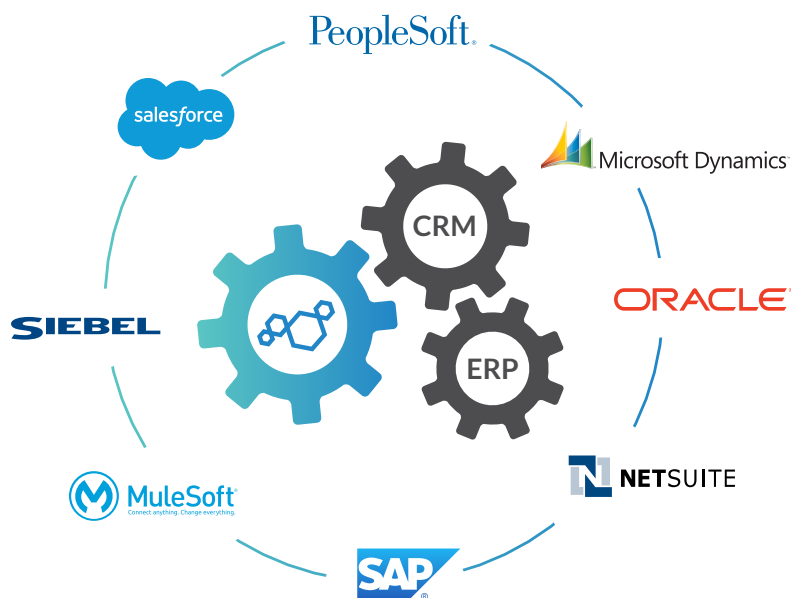
- » **Reduced** time to market
- » **Reduced** costs for development and maintenance
- » **Improved** customer experience
- » **Improved** reliability and resilience

ServicePower uses an Enterprise Service Bus (ESB) architecture to integrate the core components over a bus-like infrastructure. The core concept of the ESB architecture is to integrate different product backend systems by putting a communication bus between them and then enable each product to communicate with the bus. This decouples systems from each other, allowing them to communicate without dependency on or knowledge of other systems on the bus. The concept of ESB was born out of the need to move away from point-to-point integration, which becomes brittle and hard to manage over time.

ESB increases agility by reducing time to market for new initiatives by providing a simple, well defined, “pluggable” system that scales well. Additionally, an ESB provides a way to leverage existing systems and expose them to new applications using its communication and transformation capabilities.



The ServicePower ESB connects Consumer Portal, Mobility, Claims, Dispatch and Scheduling. In addition, ServicePower provides SOAP & REST APIs for programmatic access to read and write data from these components in the three categories of APIs; standard, export and bulk loading. The standard APIs follow the traditional architecture style where each object (resource) is identified by a single URI and supports access via one or more of the standard HTTP methods such as GET, PUT, POST and DELETE. Export APIs are used by customers who want to integrate updates, being made by the mobile technicians, into their own backend systems. Bulk APIs are used for quickly loading large quantities of master data with a single call.



In addition to REST APIs, ServicePower also provides internal application connectors that provide connectivity to specific software applications such as NetSuite, Salesforce, SAP, etc. ServicePower Application connectors are tailored for particular software APIs to quickly connect and perform data operations. For example, some operations expect a specific format or profile in XML or JSON representing a request message to that application or a response message from it. Operations for application connectors are typically configured with filters to limit the results returned.

These components of API and integration solutions make it easy for businesses to design, develop, implement useful and engaging APIs — even when they need to be integrated with legacy systems. The ServicePower APIs give businesses a powerful way to leverage the useful data that's already being stored in their internal systems and use a holistic API strategy to improve customer engagement, streamline business operations, and bring new products and services to market



ServicePower is an integrated field service management solution focused on helping companies deliver an exceptional customer experience at the lowest cost. Trusted by field service organizations around the world such as GE Appliances, ADT, Johnson Controls, John Lewis Partnership, Electrolux, Mitsubishi, LG, BSH and AIG Warranty, ServicePower is the only workforce management solution enabling organizations to efficiently manage both captive and 3rd party service providers. Our digital technology enables improved customer satisfaction, reduces costs and generates new revenue streams.

ServicePower also offers a fully managed network of 3rd party service providers to enable rapid and on-demand servicing at peak times and in hard-to-reach locations across North America and Europe.

For more, visit www.servicepower.com