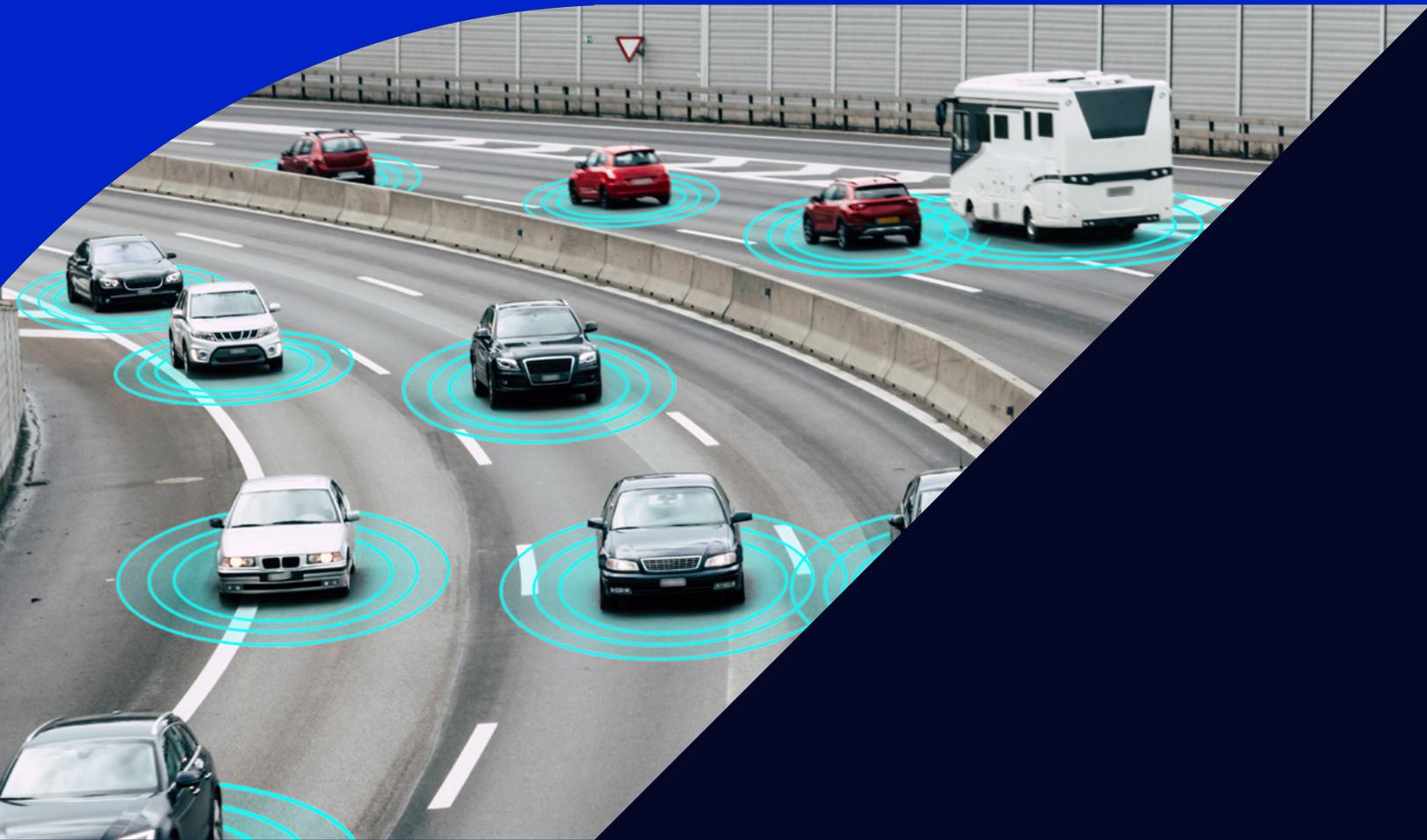Ness
Digital
Engineering

Connected Automotive Solutions

Ness helps companies in the automotive ecosystem to develop intelligent automotive platforms and connected solutions that increase the safety, efficiency, and fun of the driving experience.

Automotive companies are transforming from pure-play manufacturers to driving-experience providers. Increased environmental and safety concerns, changing consumer tastes, and advancements in digital technologies are presenting more opportunities for companies to differentiate their products. These changes are also requiring organizations to cultivate new skills for developing connected automotive solutions at scale and speed.

With the industry's shift toward Smart Mobility solutions, development will continue to accelerate around highly-connected, data-enabled products and services in areas such as Advanced Driver Assistance Systems, active & passive safety systems, telemetry, navigation, and infotainment.

Companies are using Smart Mobility to address business challenges, such as:

How can we apply connected technologies to deliver new features and services that provide a differentiated driving experience?

How can we reduce R&D cycle time and costs to more rapidly respond to consumer demands?

How can the company collect and analyze data differently to reduce manufacturing and regulatory compliance costs?

In what ways do we need to adapt to our customers' purchase journeys, as they seek new subscription and ride-sharing models?

How can we monetize the data we are collecting about the products we manufacture?

The types of solutions Ness enables for clients:

ACTIVE & PASSIVE SAFETY SYSTEMS

Enabling faster safety decisions by using machine learning, radar, night vision cameras and other sensors to highlight potential dangers before humans can sense them

ADVANCED DRIVER ASSISTANCE SYSTEMS (ADAS)

Collaborating with manufacturers to create features, such as speed limit assistance and lane departure warnings, that use automation and sensor data analytics to initiate alarms and automobile actions that improve safety

ROAD MAPPING & NAVIGATION SYSTEMS

Developing 2D and 3D image rendering, search and intelligent routing, advanced data visualizations, and location data-based products for real-time, precision decision making

TELEMETRY & FLEET ANALYSIS

Creating remote monitoring solutions that leverage Big Data & Analytics and the Internet of Things to determine the performance of in-vehicle equipment

INFOTAINMENT SOLUTIONS

Combining expertise in entertainment platform development, rich media, and the connected car to deliver innovative infotainment experiences

Ness work in action:

Ness collaborated with a client to create a navigation platform for connected cars, resulting in **next generation 2D and 3D mapping solutions and innovative 3D renderings.** This included partnering with the client on Advanced Driver Assistance Systems and Navigation Data Standards.

Ness engineered a night vision solution that uses 50 million image patches to **generate a model for pedestrian or animal detection** and highlights them via the car dash display. The technology included sensor intelligence, as well as embedded software development and testing of an automotive electronic control unit in line with AUTOSAR and SPICE standards.
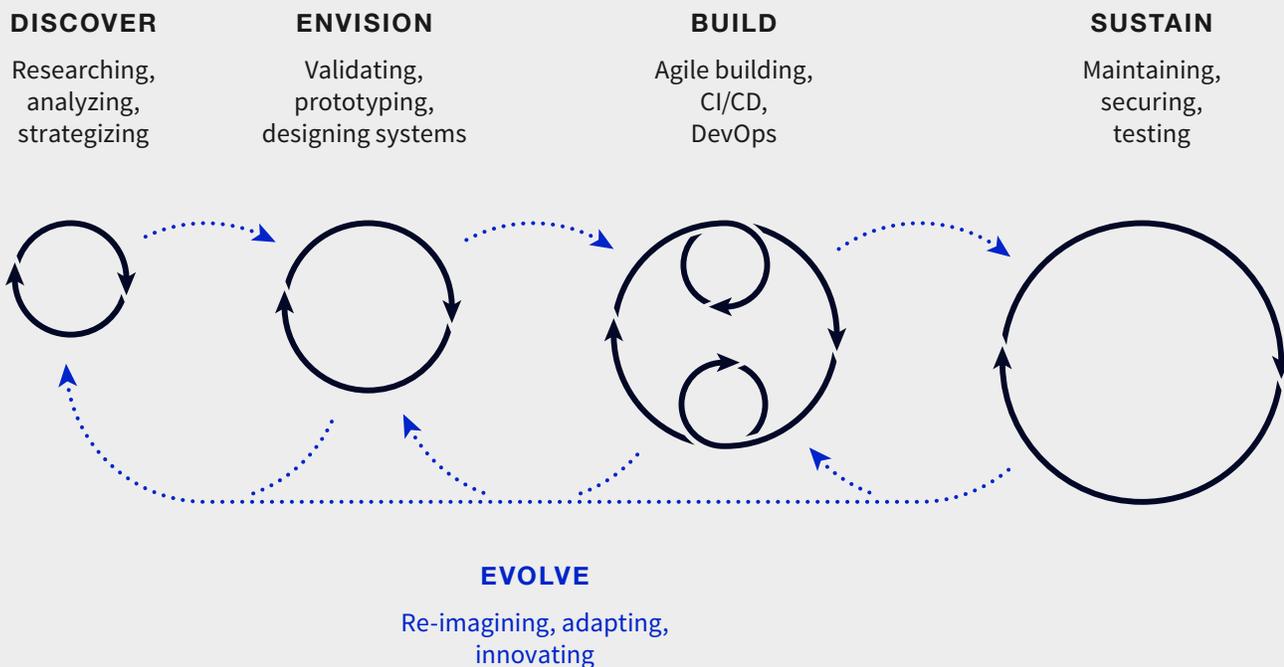
Ness leveraged its Internet of Things, data analytics, cloud, and transportation expertise to deliver a modern telematics platform for a client's fleet managers. The solution included a redesigned, field engineer application workflow that **reduced install times** for on-board vehicle monitoring units **from more than an hour to a few minutes**.

Ness Connected leads to the right solution, faster

How we ensure successful outcomes for our clients: Ness Connected

Our transformational digital engineering framework seamlessly integrates Experience & Process Design, Platform Engineering, and Data Analytics to bring compelling digital products & services to market.

The framework helps companies define and develop the right digital products & services faster to significantly accelerate time to market, improve customer engagement, and reduce business risk.

DISCOVER

Researching,
analyzing,
strategizing

ENVISION

Validating,
prototyping,
designing systems

BUILD

Agile building,
CI/CD,
DevOps

SUSTAIN

Maintaining,
securing,
testing

EVOLVE

Re-imagining, adapting,
innovating

Ness
Digital
Engineering

For ideas on how your company can achieve its business objectives using digital technologies, contact us: www.ness.com/contact

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