Automotive & Mobility Services
Connect, Secure, Authenticate drivers and passengers offering personalized services.
Automotive & Mobility Services

Automotive industry transformation
Digitalization and other megatrends are revolutionizing industries and are leading to new business models. The Automotive sector is facing such disruptive trends: connected cars, diverse mobility, autonomous driving, electrification and enhanced connectivity.

Users at the heart
Behaviors are changing and this is driven by digital life style and the need for staying connected. People want instant information and services. This is affecting the automotive sector which is moving from product performance to services with an increasing demand for shared mobility or connectivity services. Drivers and passengers are looking for having access to a set of services to facilitate their mobility.
Cities are changing, leaving more space to pedestrian zones and traffic thereby enticing passengers to use various transport modes in the same day to optimize their trip. With this new life style and the strong demand for connectivity and the ability to improve services to passengers, Automotive and Mobility players need to be part of this new economy and adapt their offer consequently.

Security by design
Even if consumers think that driverless cars will be the main form of transport in ten years’ time, security is a key concern for mobility users. Consumers want to protect their data privacy and to make sure their personal data are exchanged and stored in a safe mode both at rest and in motion. As a consequence, Automotive and Mobility players need to provide secure solutions and this starts with securing the connected car. It comes with integrating secure firmware and software applications through PKI infrastructure, key management services and identity issuance through high speed data encryption technology. Making sure that access to the car is done securely, protecting against data loss, IP theft, fraud and downtime.

Seamless customer experience
Further to security, manufacturers need to take into account the convenience providing a universal service, accessible on every device, in real time, personalized and easy to use. Drivers and passengers need to feel confident that they can easily and safely travel and this implies a secure authentication & payment while keeping their personal preferences on board.

A solution aggregating identities in a secured environment
Gemalto offer off-the-shelves solutions to help Automotive players secure digital mobility services including:

> Connect - to ensure always on mobility
Gemalto solution enables the usage of end user’s subscriptions for infotainment services in mobility and provides the technical enabler for Infotainment/Telematics connectivity.

> Secure – to safeguard user personal data
Gemalto offer enables storage and life-cycle management of security credentials for secure in-car/out-car connectivity and securing digital content. In addition to the storage, Gemalto solution has been designed to execute any mobility services in a secure environment.

Gemalto secure vehicle and back-end services:
> Securing connectivity end-to-end:
  • In vehicle and cloud secure containers
  • Keys and certificates life cycle management
> Trusting device, vehicle and firmware
  • PKI infrastructure and Key Management Services
  • Identity issuance to vehicles, Apps and users
  • Secure existing or custom FOTA systems
> Protecting Data
  • Secure data at rest with Hardware Secure Modules (HSMs)
  • Secure data in motion with high speed data encryption point-to-point or point-to-multi-points
> Security Consulting services
  • Security architecture analysis and recommendations with best practices
  • Device penetration testing and counter measures
> **Identity Management** – to support a seamless customer journey

Gemalto provide a wide range of identity verification and user authentication solutions for nomad users, as well as the capability to manage several identities for mobility use cases. Gemalto’s Identity Management solution provides an integrated user experience.

Gemalto manage IDs to deliver vehicle-to-user personalized services with:
- User ID verification at enrolment
  - Document verification
  - Mobile, web or in-branch solutions
  - Identification and authentication using biometrics
- Vehicle access
  - Virtual Car Key token generation
  - Secure Storage of vehicle key in mobile phones or wearables
- Secure in-vehicle services
  - Access in vehicle tamper proof zones
  - Download of trusted services Apps
- Personalize vehicle
  - Manage user credentials to simplify service access and payment
  - Download user preferences in the car to provide personalized services

Gemalto solution enables to aggregate user identities to facilitate service access and content delivery

> **Monetize** – to adapt models for better revenue generation

Gemalto offer software licensing management, as well as IP protection, to protect and adapt business models with user requirements and monitor service usage.

Monetize in-vehicle and cloud based services:
- IP Protection from reverse engineering and code tempering
- Secure Licensing
- Business Model Versatility
- Life Cycle Management
- Product Usage insight
- Customer self-service

Gemalto is consistently working on complementing its offer and already started to integrate further IDs from the mobility ecosystem.