ice engine

Transform manual processes through one revolutionary digital platform

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It caters for governments in both emerging and established economies that need to enhance their e-governance, revenue collection, licencing, border management, tolling management, and/or law enforcement capabilities.

ICE Engine facilitates interaction between government, business, and individuals through the following key elements:

○ A standards-based, integrated process orchestration engine that drives information between users, services, legacy applications and/or external systems.

○ A built-in application builder, enabled via a low-code development framework, to develop transactions, API calls and integrations required by government, businesses and/or service providers.

○ An open source platform that easily integrates with external systems and services.

› Benefits

ICE Engine's platform-centric approach brings the following benefits:

○ Solutions can be deployed quickly
○ Solutions can be easily maintained
○ The constituent client base can easily access the information
○ Solutions can be accessed through low-level mobile devices
○ Solutions mitigate the need for extensive infrastructure investment

› System Infrastructure

The ICE Engine system infrastructure requirements are lightweight, which is advantageous for deployment, maintenance, and system migration. It uses cloud-native principles and can be installed on-premise (internal to client infrastructure) or hosted on cloud infrastructure. End-users can access the system via a mobile App or a web-based front-end user interface. System maintenance functions are accessed via a set of proprietary web-based interfaces.

> ## Development Framework offering Reusable Assets

The ICE Engine framework includes native enterprise-level features in application development, security, reporting and auditing.

○ Application development is three to six times faster versus contemporary offerings

○ Standards-based security is core with role-based, two-factor authentication and authorisation

○ Configurable by a non-developer yet includes advanced and powerful capabilities such as:
  ○ Custom code
  ○ Scripting
  ○ SQL within configuration

> ## Key Capabilities

The ICE Engine's fundamental capabilities can be implemented as a solution on its own or as the foundation to be leveraged by the ICE modules.

The core capabilities are:

○ Identity management (complete Home Affairs function)

○ Biometric citizen/alien enrolment and live capture

○ Births, deaths register

○ Relationship management

○ ID card, licencing and permit issuance

○ Card and permit printing on secure stationery

○ Licencing e.g. vehicle licences, TV licences, firearm licences

○ Prepayment wallet mangement system

○ Aggregator of payment channels into a single payment platform

○ Mobile and online internet banking

○ Service Desk – incident and call logging

○ Client Self-Service Portal

○ Centralised Know Your Customer (KYC)

○ Business intelligence reporting

○ Region-specific requirements

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⟩ Integrated Modules

With ICE Engine as the core, the addition of multiple ICE modules creates a powerful holistic e-governance digital solution for government. Each module addresses a specific government service vertical to enhance revenue collection, improve governance and compliance, and offer a trouble-free citizen experience.

ICE Tolling
Improve revenue collection to improve road infrastructure and inter-agency compliance

ICE Vehicle Tolling facilitates the efficient and expeditious transit of vehicles through toll sites/plazas. It electronically identifies vehicles using automated number plate recognition (ANPR) cameras, classifies the vehicle and calculates the appropriate tolling fees. The holistic integration allows for real-time vehicle reporting and accurate fees/fines to be levied and collected.

ICE TIS
Digitise the transport department for better compliance while alleviating citizen frustration

ICE Transport Information System (TIS) manages the lifecycle of vehicles – from registration, licencing, insurance to scrapping.

It also facilitates owner/driver responsibilities from licence application to cross-border compliance. Citizens can conveniently process requests themselves online via the customer self-service portal.

ICE Borders
Enhance border control and streamline operations

ICE Borders optimises the transit of vehicle traffic through border crossings, minimising transit times using powerful technologies and process automations, while integrating services and procedures across multiple government agencies.

ICE Borders collects and shares information between government agencies managing border movement, customs and excise, while assisting them to enforce compliance and national security.

ICE enforcement

ICE parks

ICE billing

ICE Enforcement

Equip law enforcement through digital transformation

ICE Enforcement is a set of ditigal tools that equips officers with real-time data at their fingertips and provides the ability to upload critical information related to infringements, accidents and crimes.

ICE Parks

Responsible management of environmental resources, and the access thereto

ICE Parks manages the issue of relevant permits and revenue collection for responsible access to environmentally sensitive areas.

Permit holders are actively administered with reminders for expiring permits, and infringement and renewal administration. It also facilitates the monitoring, analysis and reporting of vehicle entry and exit to the areas for statistical purposes or law enforcement.

ICE Billing

Digitise the billing lifecycle to accelerate revenue collection while consumers optimise their costs

ICE billing streamlines the billing process from meter readings, bill presentation and revenue collection. It can be implemented as a standalone system or on a national scale and can manage these services from a building level, scaling across suburbs, towns, and cities to provide effective billing management.

The ICE Engine architecture, extensibility and adaptability uniquely meet the demands of e-governance for nations and jurisdictions with a future-facing outlook. It is completely focused on enhancing compliance and revenue collection for government, while serving the needs of the citizen with an improved e-government experience.