# So2DE

business & technology consultants

# **Al Solutions**







ML & AI Competence **Center S2E** 



 $S \circ 2$ business & technology consultan Our Pillars have always been people and innovation.

Intelligent **Automation** CoE S2E



#### 2023 - 2024: Launch of three development areas and Galene.AI vertical specialization



#### **Custom AI Agents**

A proprietary framework for the development of Conversational Agents.



S2E is a partner of the Italian Prime Minister's Office for the Internal adoption of Conversational Agents.

#### **AI Agents Compliance**

"Firewall" for the Adaptive **Compliance of AI Agents.** 



**Disruptive Use Case & Best Architecture Awards** 



**Proprietary software for the efficient** orchestration of AI models



S2E is the only SA Consulting Partner in Europe with expertise in managing **NVIDIA AI's DGX Computing,** Networking, and Software.





WINNER 2023

S2E, through its brand Galene.AI, focusing on innovative products to establish a solid and sustainable presence in the ethical and human-centric Al sector.

## **Increasing Adoption & Regulatory Pressure**

**Companies must swiftly adapt to evolving** standards to avoid fines and reputational damage. Adaptive compliance is now a necessity.

#### **GenAl Worldwide Adoption Rates by Industry**

🔤 Not sure 👘 No interest		deploy -3 years		deploy between 4 months	Will deploy within next 12 months	Have already deployed
Life sciences (n = 53)	15%	6%	8%	15%	49%	8%
CSP (n = 43)	21	%	12%	12%	42%	14%
Oil and gas (n = 44)	14%	149	6	20%	43%	9%
Asset-intensive manufacturing industries (n = 227)	18%	6%	10%	17%	35%	14%
Transportation (n = 91)	2	6%	1	0% 15%	38%	8%
Consumer goods (n = 144)	19%	6	9%	23%	38%	7%
Retail (n = 85)	24	4%	13	16%	40%	5%
Healthcare payers (n = 44)	16%	5%	14%	23%	34%	9%
Banking (n = 234)	15%		19%	23%	37%	5%
Higher education (n = 137)	15%		20%	22%	30%	12%
Automotive (n = 68)	22	!%	18	18%	29%	12%
Utilities (n = 90)	12%	6%	18%	23%	37%	
U.S. healthcare payers (n = 33)	15%	6%	15%	24%	33%	6%
Total (n = 2,443)	17%	6 - M	16%	21%	34%	9%
0	%			50%		100%

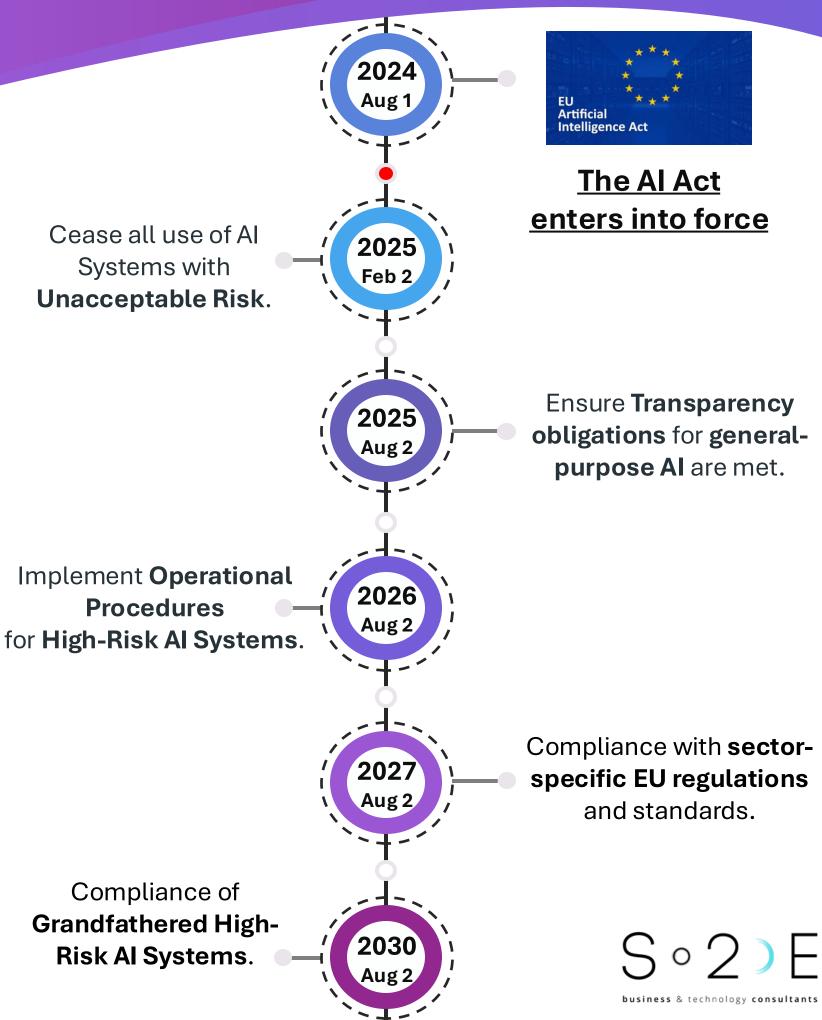
n varies

Q. What are your enterprise's plans in terms of the following digital technologies and trends?

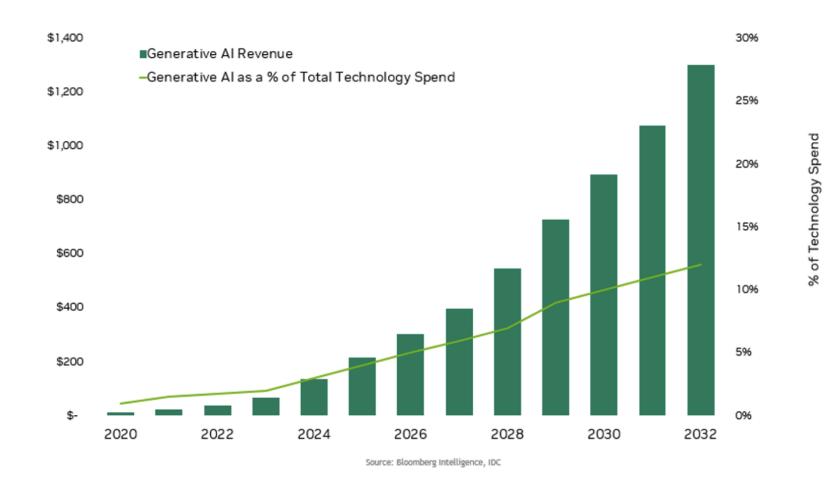
Source: 2024 Gartner CIO and Technology Executive Survey

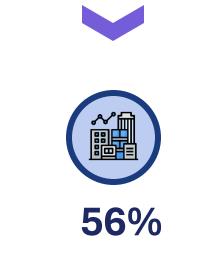
Note: The percentages do not equal to 100%. Percentages below 5% are not shown.

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## **GenAl: Driving Efficiency** and Transformation

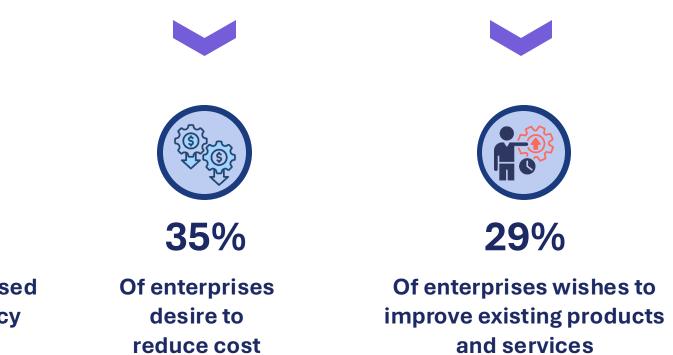




Of enterprises are focused on improving efficiency and productivity

Source: Bloomberg Intellicence, IDC

79% of the leaders expect GenAl to drive substantial transformation within their organization and industry over the next three years.



Source: The state of Generative AI in the Enterprise, Deloitte 2024



## Complexities in GenAl Projects Production



### **Development and deployment of production** generative AI is a complex undertaking.

### **Transitioning from Pilot to Production**

Over 80% of Enterprises transition from pilot to production take more than half a year

### **Struggle With Complexity**

It takes an average of 7.3 months from pilot to production Only 31% have AI deployed in production

### **Growing Adoption of Cloud**

Key challenges in adopting generative AI: data quality and availability, computational resources and security

Source: "IDC FutureScape, Worldwide AI and Automation 2023 Predictions", 2022. Gartner, "2023 Planning Guide for Analytics and AI"



# The Al Innovation Challenge



#### AI Act & GDPR Regulatory Pressure

As regulatory deadlines approach, companies face increasing pressure to comply with the AI Act's stringent requirements.



Low Production Rates for Al Agents

Many AI agents fail to reach production due to inconsistent reliability, often lacking in precise, actionable insights.

With the upcoming regulatory deadlines between 2025 and 2027, companies struggle to align with the AI Act's compliance requirements.

24% of large Italian enterprises
have AI solutions in production.
58% of italian businesses face
challenges in finding AI solutions
that meet sector-specific needs.



Complexity in Infrastructure Efficiency

Hybrid infrastructures bring scalability potential but also complexity. Many companies face challenges in optimizing AI and ML operations.

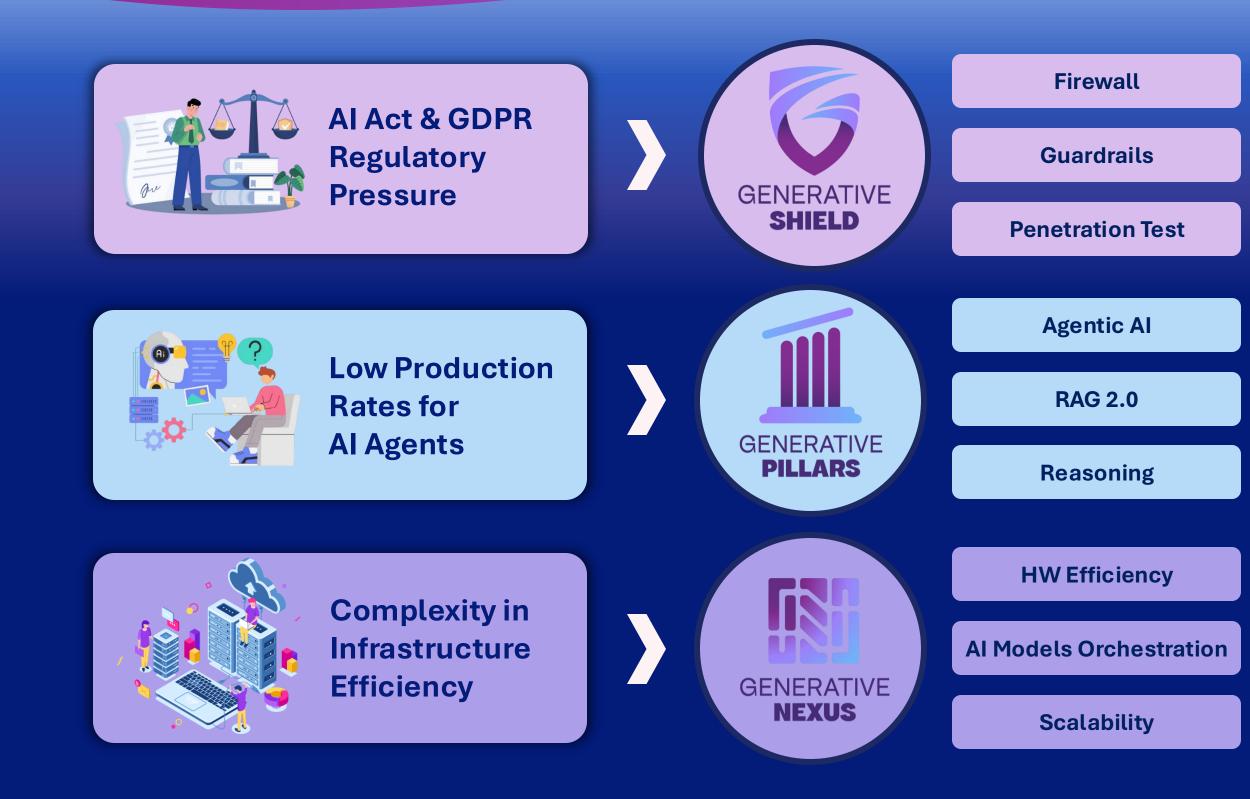


**80%** of AI practitioners cite lack of orchestration tools as a barrier to deployment.

**70%** of companies report difficulties in scaling operations across hybrid environments.

Sources: 2024, Report - ClearML, FuriosaAI, AllA "The State of AI Infrastructure at Scale 2024"; 2023 – ClearML "Machine Learning Infrastructure Survey"

## **G** Our Full-Stack AI Solution



Testing AI compliance and mitigating risks in real-time, aligning with AI Act and GDPR requirements.

Empowering reliable, sectorspecific AI agents designed for precision and business impact.

Optimizing hybrid Al infrastructures for scalability, efficiency, and cost-effectiveness.

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## The Compliance Guardrails & Scanner for AI Agents **Built for AI Act Readiness**

**Definition of the Use Case & Declaration of AI Act Risk Level** 

Acting as a **Firewall** for LLM models and AI Agents, it provides Guardrails to mitigate risks and performs Penetration Tests to ensure compliance and adaptability with evolving regulations.

**Generative Shield Guardrails Real-Time Risk Mitigation** for AI Interactions, without performance impact.



**Cybersecurity & Exploitability** 

Accuracy, Integrity, & **Sustainability** 

**Ethical & Legal Compliance** 



**Recurrent Subscription** Simultaneous Responses

**Recurrent Subscription** Annual Scans Available

**Data Governance Management** and GDPR adherence details

#### **Generative Shield Scanner**

In-depth compliance checks and automated Reporting, ensuring ethical and legal AI usage.

**Data Protection & Privacy** 



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Solution tailored to meet industry-specific and EU regulatory requirements, such as the Al Act.





## The Advanced AI Agentic Workflows Built to Your Needs



Prompt

Integrating RAG 2.0 capabilities with advanced Reasoning, it orchestrates a cohesive workflow of specialized AI agents, delivering an Agentic AI system that ensures accuracy, reliability, and control.



Dataset  $\overrightarrow{0}$   $\overrightarrow{a}$   $\overrightarrow{a}$  Dataset  $\overrightarrow{0}$   $\overrightarrow{a}$   $\overrightarrow{a}$   $\overrightarrow{a}$   $\overrightarrow{a}$   $\overrightarrow{a}$ Source Examples



Seamless distribution platform integration



Recurrent Subscription Licensing & Support

Una Tantum Fees *Al Agent Development* 



**Prompt Refining** through Proprietary LLMs Orchestration for Disambiguation & Security

Information Retriaval

> Knowledge Base Semantic & Relational Search Categorization & Filtering

Data Embedding

Context Enrichment

Validated Response Purpose-Aligned Feedback Loop Micro-Model LLM Cloud Deep Reasoning, Adversary-Agents reinforcement

reasoning



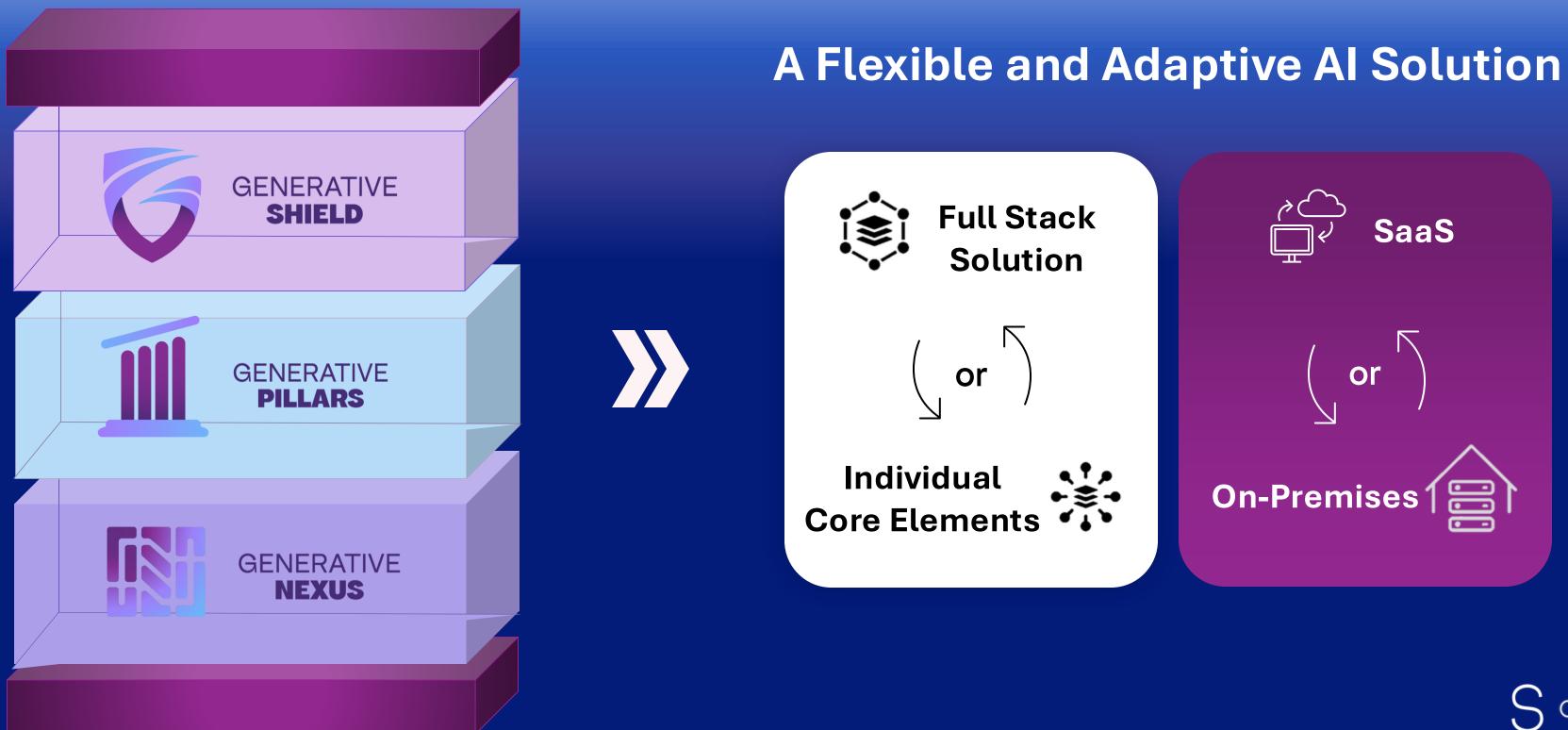




**Recurrent Subscription** Maintenance & Support

**Una Tantum Fees** Solutions Development





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## Galene.AI Capabilities & Applications

## **AI Agents Applications**

#### Galene.AI Capabilities

#### **Text Agent:**

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Text Conversation Web Search Doc. Understanding History & Context

Use Cases

#### Image Agent

Image Understanding Image Generation

#### Voice Agent:



Voice Conversation Voice Generation

#### **Coding Al Assistantsì**

**Features**: Refactoring, debugging, documentation, transpiling.

**Integration**: Compatible with VSCode and IntelliJ IDEA IDEs through dedicated API

#### Text-to-SQL Agent



# **Features**: Translates natural language queries into SQL/NoSQL/Graph Query languages.

**Applications:** BI, data analytics, database administration.



#### **Tailormade Agents**

Clients can request the develop of personalized AI Agents for industry and company-specific needs,

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#### **Knowledge Base Agent**

**Features:** accurate retrieving, context-driven responses using company data.

**Supported Domains:** Legal, PR, Sales, HelpDesk, IT Support.

#### **Generic Agent**

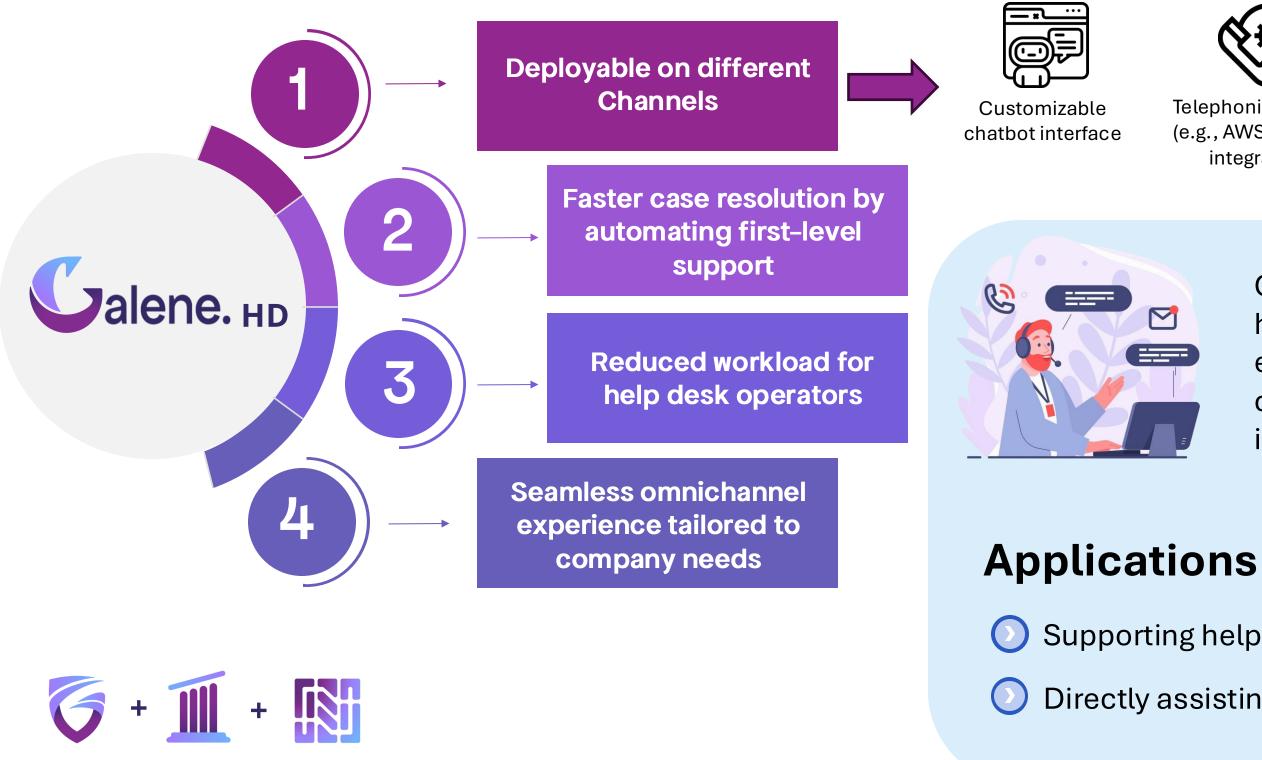
**Features**: Custom intent support. Tailored content generation.

**Functionality:** Multiple capabilities to address complex needs.

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## Galene.HD Help-desk



Use Cases

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**Telephonic support** (e.g., AWS Connect integration)



Widgets and Progressive Web Apps



Messaging platforms such as WhatsApp or enterprise communication tools



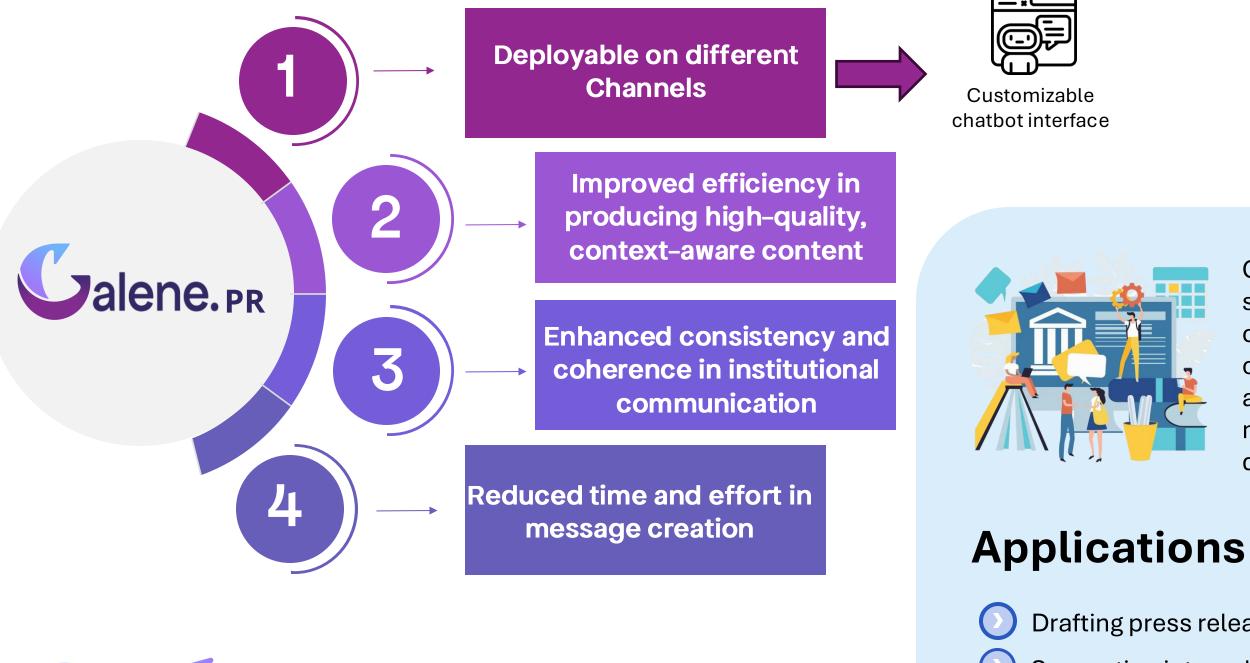
Galene. HD is designed to streamline help desk operations and assistance. It enables efficient query analysis and case consultation based on personal information, case type or status.

Supporting help desk operators

Directly assisting end-users with first-level queries.

## Galene.PR **Public Relations**







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Widgets and **Progressive Web** Apps



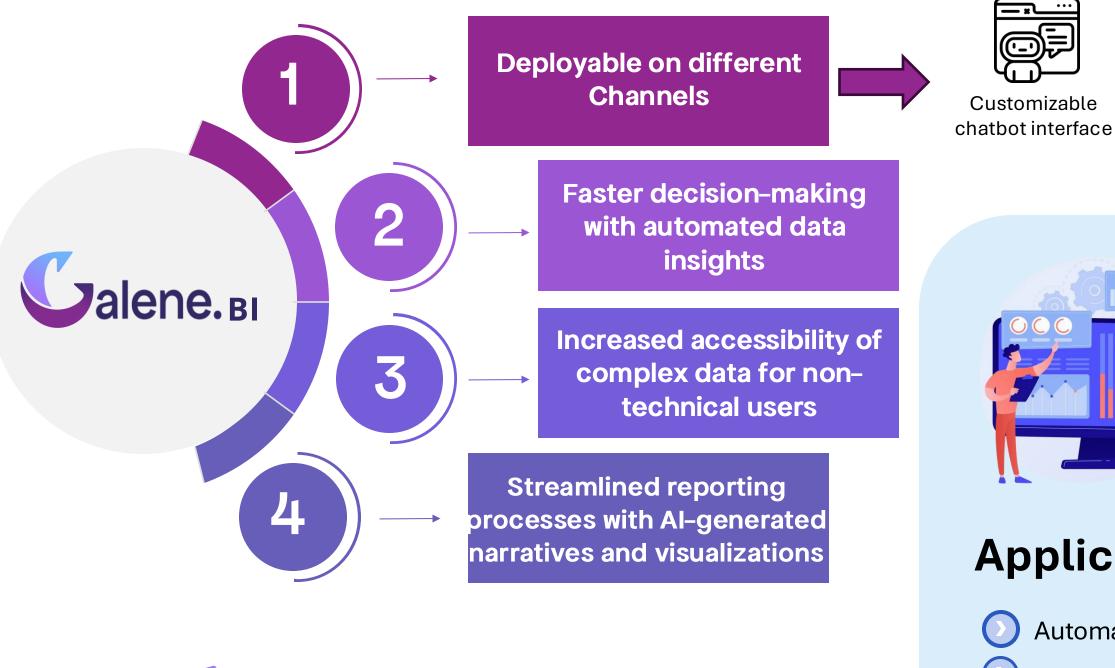
Messaging platforms such as WhatsApp or enterprise communication tools



Galene.PA offers contextual and coherent support for public relations and institutional communication. Tailored for communication offices within central and local government administrations, the solution ensures consistent messaging aligned with the organization's dataset and context.

- Drafting press releases and public statements
- Supporting internal and external communications
- Ensuring alignment with public policies and institutional tone

## Galene.BI **Business Intelligence**



Use Cases

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Creating dynamic, visually engaging dashboards

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Widgets and **Progressive Web** Apps



Messaging platforms such as WhatsApp or enterprise communication tools



Galene.BI leverages AI to transform raw tabular data (e.g., sales tables, budgets, SQL databases) into actionable insights. The solution automates text-to-SQL queries and generates natural language reports, interactive data visualizations, and dashboards.

## **Applications**

Automating the generation of data insights for sales and budgeting

Translating complex datasets into human-readable formats

# So2E

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Talk to Sales

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