

*Conversation
in action*

Almawave
PEOPLE **CENTERED** TECHNOLOGY

 Iridetext ANALYTICS

The advance text classification

MULTICHANNEL



 **irideTEXT ANALYTICS**

**AUTOMATIC DISPATCHING
&
CLASSIFICATION**



TRIAGE

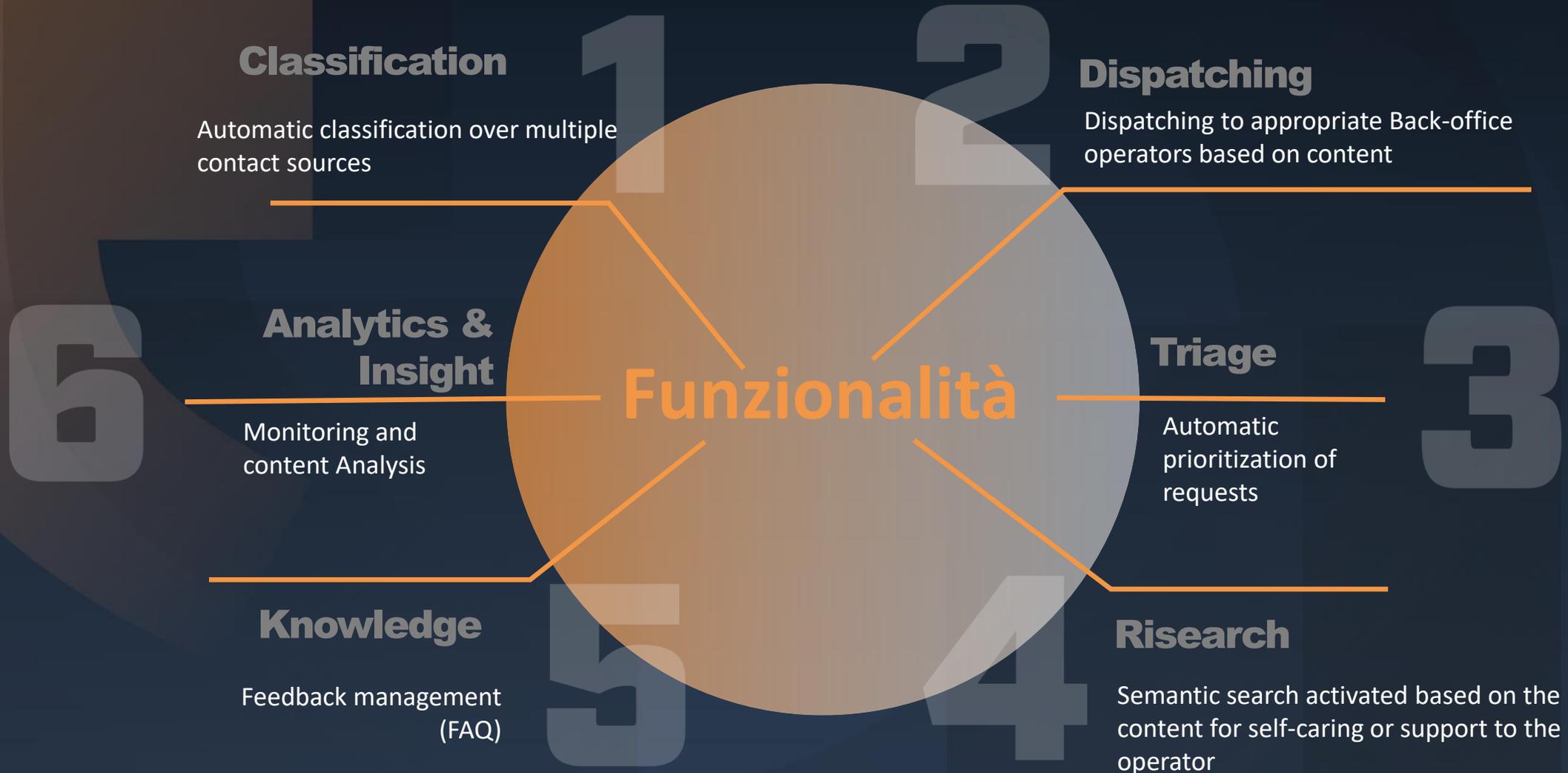


SEMANTIC BI



Functionality

Iride Text Analytics[®] Right and fast semantic contact classification



Classification

Automatic & effective classification of contents coming from different channels according to dynamic and highly configurable logics

A consistent approach to manage content from different sources / channels



KNOWLEDGE BASE

DOCUMENTS

MAIL

WEB CONTENTS

AUTOMATIC CLASSIFICATION

MULTI CONTENT | CHANNEL CLASSIFICATION LAYER

Homogeneous and Consistent Classification over multiple contact sources

Extraction of **key concepts** for the automatic document classification or in user suggestion mode for the final validation

2 Dispatching

The customer submit a reporting/ request of support from the available channels (email, web form...)



The image shows two overlapping windows. The background window is a web form titled "Richiesta Assistenza Area Riservata". It contains a message: "Se hai bisogno di assistenza all'Area Riservata scrivi una contattato telefonicamente da un nostro operatore." Below this is a form with fields for "Tipo Cliente" (set to "Privato"), "Dati", "Nome", "Cognome", and "Codice". The foreground window is an email client window titled "New Message" with fields for "To:", "Cc:", "Bcc:", and "Subject:".

Example of classification in the Contact Center area

The operator writes the note to map the customer's need



The image shows a screenshot of the "Iride CRM Prompter" interface. It features a navigation bar with "Home" and "Iride CRM Prompter" tabs. Below the navigation bar is a "Create New..." dropdown and a "Recent Items" section. The main content area is titled "Iride CRM Prompter Prompter Box" and contains a text box with the text: "Il cliente chiede informazioni sullo smarrimento della sua carta di credito". Below the text box are two buttons: "Classifica" and "Annulla". At the bottom of the interface, there is a breadcrumb trail: "Carta credito | Info | smarrimento".

Thanks to the Iride semantic-ontological engine the content (mail, form any operator notes, text, chat, etc) is classified automatically, based on predefined and multilevel categories.

Based on preconfigured rules and/or specific business events (e.g. language, contact reason, SLA, etc.) allows to routing the contents to configurable "destinations" (operators, groups, functions)

3 Triage

Requests classified by the engine can be prioritized based on specific rules

Descrizione	Sla	Triage
Furto valigia a bordo	07/10/2016 12:44	Red
Rimborso biglietto non acquistato a mio nome...	28/06/2017 16:20	Red
Richiesta di sollecito della segnalazione effettuata in da..	12/09/2017 14:34	Yellow
Info costo biglietti per	01/01/2 018	Green
Info su prenotazione effett...		Green

Enable processing by agents of reports considered to be the greater relevance to ensure timely intervention in resolving cases.

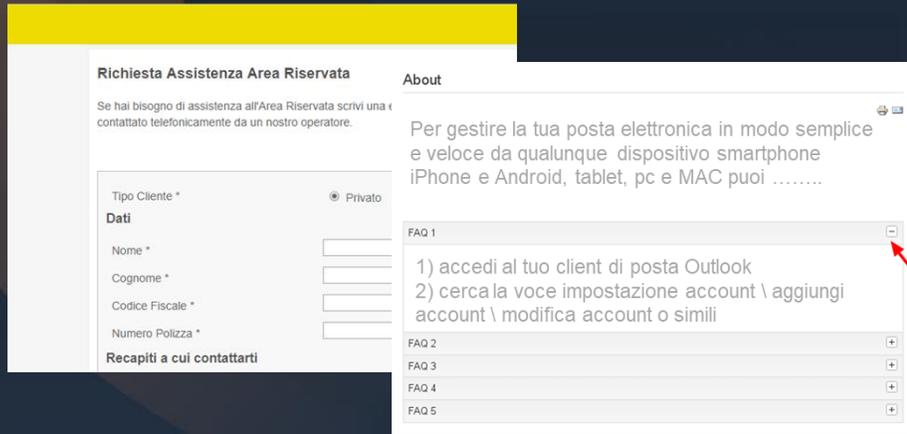
- Requests can be prioritized eg. based on:
- Topic
- Combination of concepts
- Sender
- Recognition of entities of interest (eg consumers, ... competitors, ..)

4 & 5

Research and Knowledge

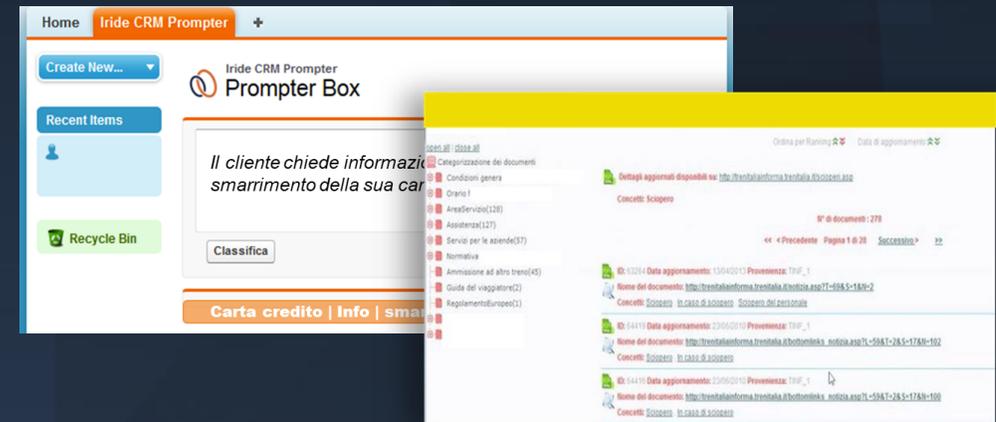
The description in natural language used by the Customer to describe the need (or by the operator to map the request), besides the classification of the case, is also used for the information recovery contained in the knowledge base useful for its management

CLIENT – SELF CARE



Direct access to **certified answers** (FAQ) and other knowledge base contents within the form for a first level of **unassisted automated support**

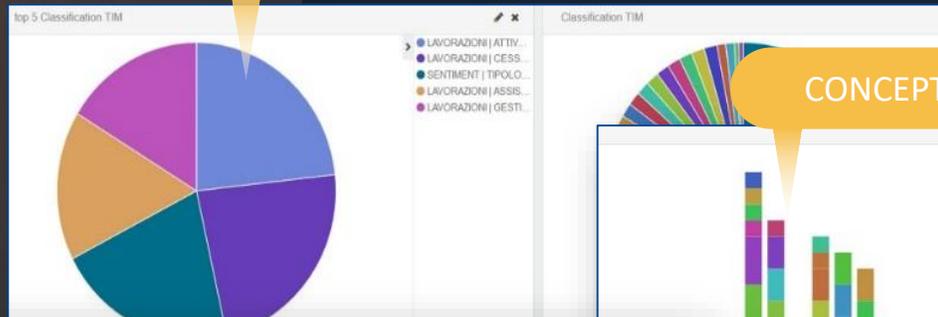
AGENT – SELF ASSISTANT



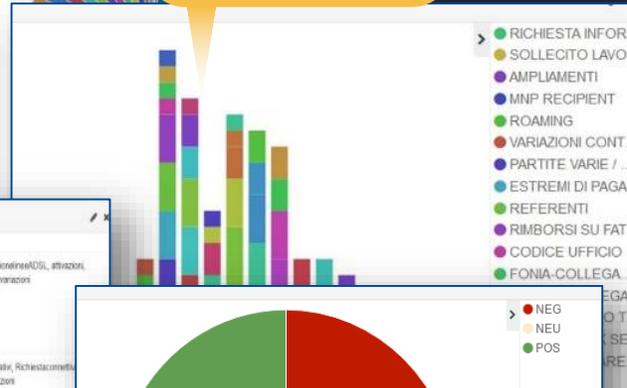
Support to the operator in the management of the reports, automatic selection (contextual based on the topic) of contents from the knowledge base (one click solution)

Analytics & Insight

CLASSIFICATIONS



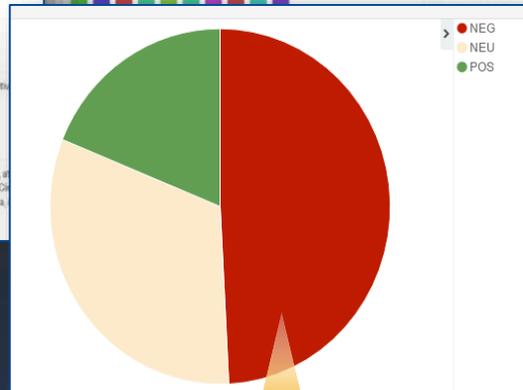
CONCEPTS



CONTENT DETAILS

Classificato	Richiesta	Linea	LAVORAZIONI ATTIVAZIONI ADSL-AUCE	Richiesta attivazione in ADSL, attivazioni, linee, variazioni
November 15th 2016, 13:45:43.515	Canale Dati TIM	Linea Società **** [] come da contratto telefonico ti invio le caratteristiche delle due linee da attivare: Una adsl bilanciata a 20M o a 2 MB in upload per lo streaming una adsl a 7 o meglio ancora a 20 MB per il web. Le linee devono essere attivate per domani mattina.		
November 15th 2016, 13:45:43.511	Canale Dati TIM	**** MULTISERVIZI nuovo accesso SPC [] in allegato documentazione necessaria per l'emissione dell'OL per il nuovo accesso in convenzione SPC di **** Multiservizi sede di **** Cerreto ****	LAVORAZIONI ATTIVAZIONI DATI-HYPERWAY	hyperway, ordinativi, Richiestaconnett...
November 15th 2016, 13:45:46.433	Canale Dati TIM	EMESSI OLL+ ALLEGATO 2 - 4 Nuove linee SPC INTERNET ****, progetto **** [Richiesta Emissione OL 4 Nuove linee **** in approvazione	LAVORAZIONI ATTIVAZIONI DATI-HYPERWAY, SENTIMENT TIPOLOGIA SENTIMENT SENTIMENT NEGATIVO	Richiestaconnettivita/hyperway, linee di contratto, sostituzione, insediamento di hyperway, ordinativi, acquisto, verifica...

STATE OF WORK



Real time monitoring, reporting, alerting

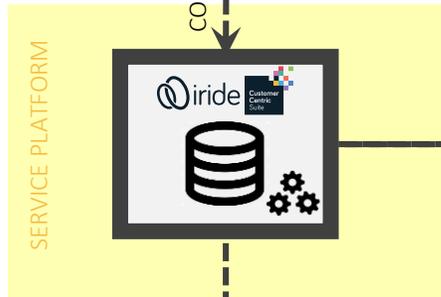
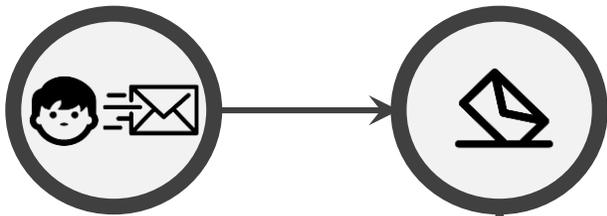
- Real-time monitoring of processing status and analysis of contact reasons through summary and detailed views
- Alerting based on content thresholds and events
- Dynamic widgets to build custom reports
- Export functionality in standard formats for integration into other company systems

The Process

Iride Text Analytics[®] for the automatic contact classification

Use case
e-mail channel

- ① The customer send the email The email arrives on the mail server

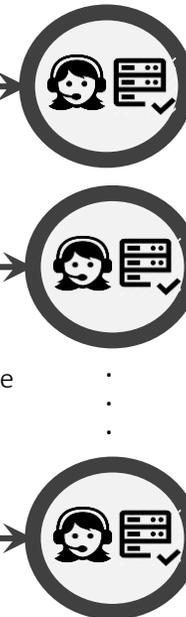


- ② The engine classifies the request based on semantic content

- ③ To do list agent with automatic request Triage

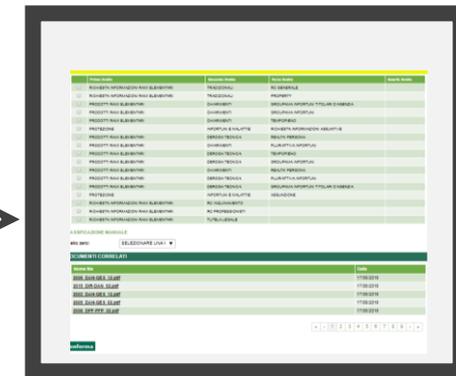
DISPATCHING

Configurable assignment logics



Descrizione	Id	Triage
Furto valigia a bordo	07/10/2016 12:48	Red
Restorno biglietti non acquistati a mio nome...	28/08/2017 16:25	Red
Richiesta di sollecito della segnalazione effettuata in da...	12/09/2017 14:34	Yellow
Info costo biglietti per ...	01/01/2 018	Green
Info su prenotazione effett...		Green

- ④ The agent displays the classifications proposed by the engine and the associated knowledge base (Certified responses)



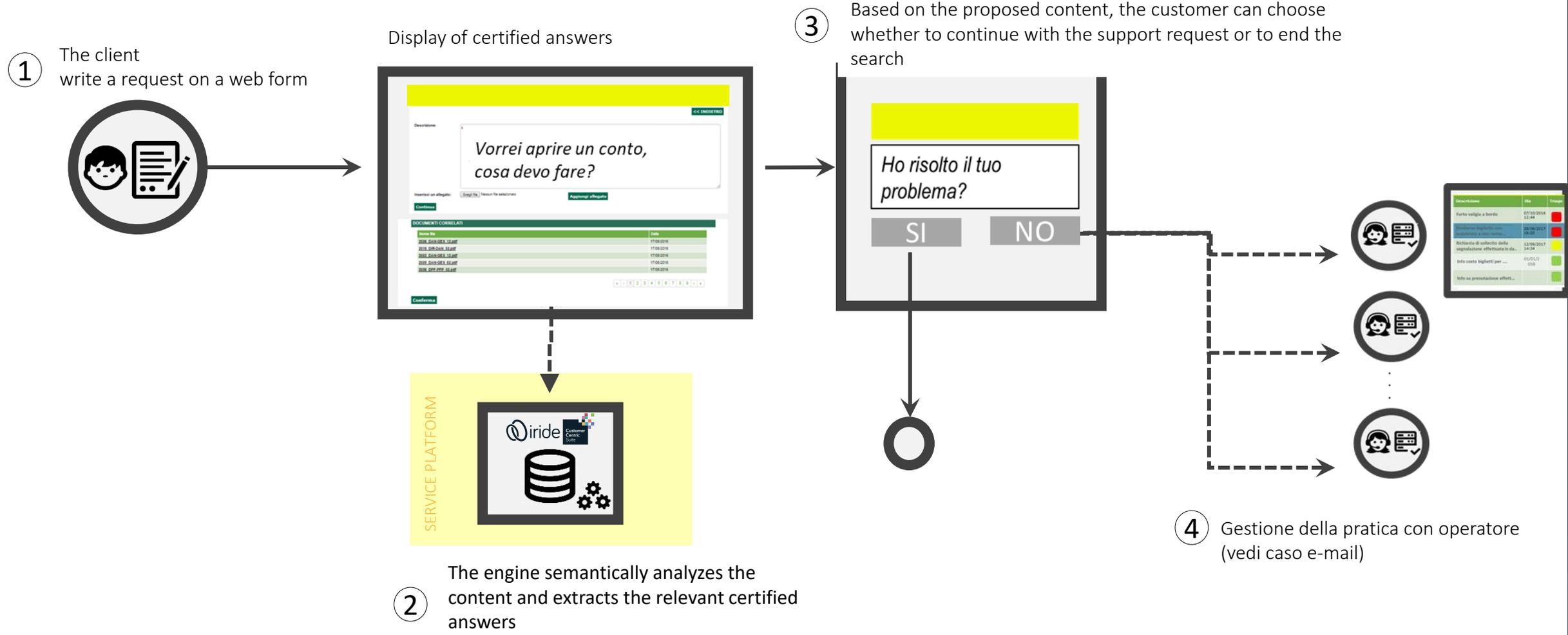
- ⑤ The agent can search for further documentation to support the case resolution

Real-time updating of defined views and analytics



Iride Text Analytics[®] for the automatic contact classification

Use case
web form management



Technical features

Iride Text Analytics[®] for the automatic classification

Technical highlights

Multichannel: acquisition from multiple data sources through out-of-the-box connectors and extension with custom connectors

Semantic indexing and classification: recognition of nominal concepts , entities and automatic classification based on configurable logic and categories (eg from CRM catalog)

Business rules management: definition of automatic rules on the different types of contact: routing and prioritization

Research and documentary navigation on a semantic basis: semantic-ontological search engine and connectors for indexing web sources, file systems, cms, databases, telephone transcriptions, audio / video content

Native Integration with Siebel, Siebel Open UI and Salesforce and many more

APIs interface for integration with third party systems

Native voice channel: extracting information from telephone transcripts

Alerting in real time: identify and manage specific events (eg priority requests, recourse to legal actions and / or consumer associations, ...)

CHANNELS THAT CAN BE ACTIVATED

- Social (Facebook, Twitter, Google+)
- WEB (Form e pagine)
- Email
- Data Base
- Web crawler
- Voice files
- File system (doc, pdf, txt, ppt, csv)

Iride Text Analytics [®]

CHANNELS

- FILE SYSTEM
- CRAWLER
- DB
- MAIL
- SOCIAL
 - FACEBOOK
 - Twitter
 - G+
- FEED RSS
- PVT

WEB SERVICES
REST API (JSON)

Per integrazione
in altri sistemi

WEB

PROMPTER
Operator note

DASHBOARD

SEMANTIC-ONTOLOGICAL ENGINE

INDEXING

ONTOLOGY

CLASSIFICATION

RULES

STATISTIC

CLUSTERING

PROPRIETARY ALGORITHMS

PUBBLICATION

CONTENT VIEW

ANALYTICS

Within the Data Base you can define application profiling, persist configuration and classification associated with the analyzed text.

- **Mysql**
 - Oracle
 - **Sql server**
-  

FRONT END
LAYER

APPLICATION
LAYER

DATA
LAYER

BENEFITS

Iride Text Analytics[®] for the automatic classification

+ QUALITA'
VELOCITA'
EFFICENZA

Typical Issues

How we solve them

Often contacts are handled by the «wrong» agent (eg. lack of proper skills related to the request)



Automatic Contact Dispatching based on content analyzed (NLP)

Difficulties to identify information both from customers and operators



Unified access to the different existing information sources and context-driven answers

Time to Serve the contact is always a critical factor for CM operations



Higher efficiency to handle conversations (-5/-10% AHT) thanks to the operators with appropriate skills based on the automatic classification

A **very low accuracy of contact classification**, always limited to the same triplets (average error 30-40%), low quality of the answers



Higher classification accuracy (up to 90%), quality and homogeneity in the answers thanks to the contextualized research

Use cases

1 The agent access the Automatic Classification tab in the INBOUND view and write the note

3 Integration with Siebel Open UI

The operator can accept the classification as proposed by the system or change it.

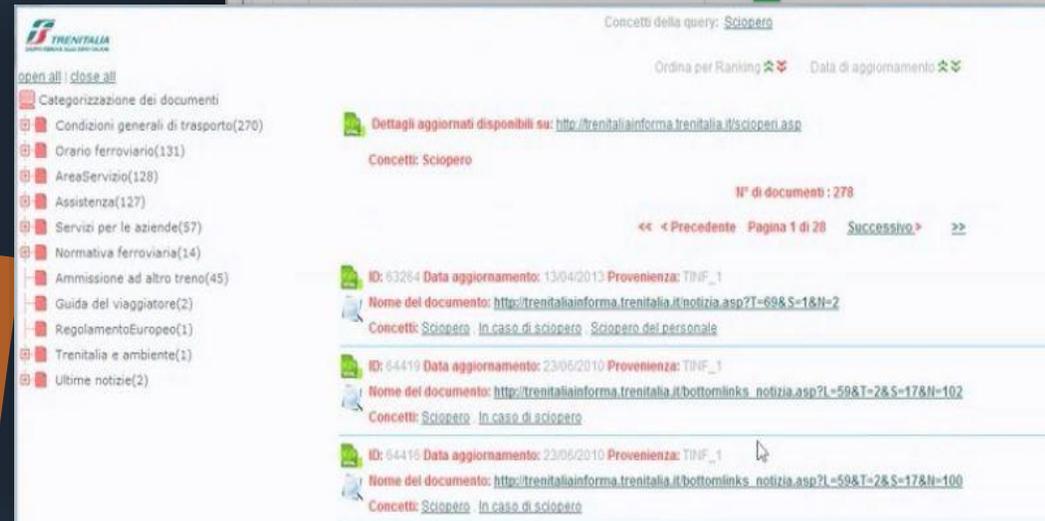
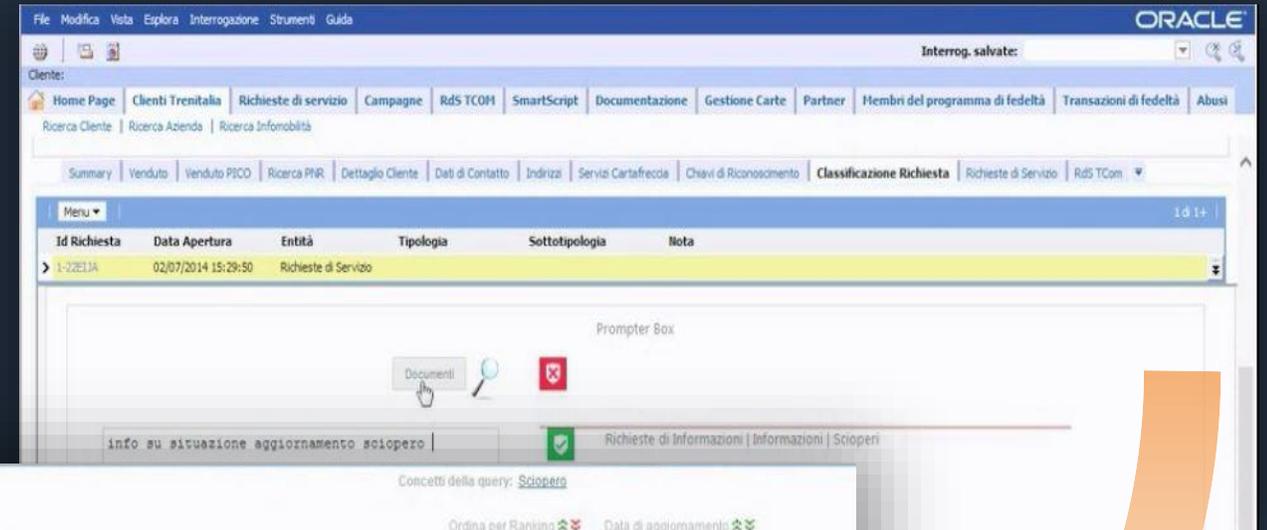
Every operation gets logged into the system

BENEFITS

- ✓ Automation of the process classification
- ✓ More precise classifications
- ✓ Better dispatching of the customer needs to the correct operator

2 Leftside the description field gets prefilled with agent notes and the suggested classification populated

- While writing the notes, the engine displays the best classification available
- The most relevant documents and FAQs are also displayed besides the classification



BENEFITS

- 5% AHT Reduction
- 90% classification accuracy
- 15% training time/cost reduction

Iride Text Analytics for reported "accidents at work" classification

PUBLIC SECTOR

Standardize and speed up the classification process of accidents at work according to ESAW coding (European standard for accident at work based on a 6 level classification)



"Best practices" of technological innovation at the service of safety and prevention in the "ISSA GOOD PRACTICE AWARDS EUROPE-2016".

BENEFITS

- ✓ Automatic classification of accident at work reports.
- ✓ Increased operational efficiency
- ✓ Strong decrease of unclassified accident at work REPORTS

Automatic classifications compliant to European standards with precision levels above 90%



 **Almawave**

PEOPLE **CENTERD** TECHNOLOGY

Thank You