

ROBOTICS FOR CUSTOMERS

Reply has built its own **Robotics for Customers** approach in the context of Data-Driven Customer Engagement.

Robotics for Customers is a framework built on two foundational pillars: **Recommendation Systems** and **Conversational Systems**.

WHAT IS ROBOTICS FOR CUSTOMERS?

The age of digital data is eliciting the rise of intelligent systems. Thanks to the exponential availability of data and the attendant growth of computational capabilities, **it is now possible to create machines that are able to anticipate proactively the needs and intentions of human users.**

Digital devices are being related to the notion of the extended mind, once the boundaries between human cognitive capabilities and digital ones become increasingly more unified in a seamless continuum. Moreover, a key element in understanding the growth of economies and wealth in society is the understanding of the growth of information, managed daily by digital platforms.

Machine Learning and *Artificial Intelligence* techniques are at the forefront of this revolution. Once these techniques **focus on assisting people in their real lives, we refer to *Robotics for Customers***. Well known implementations of *Robotics for Customers* are at the basis of many of the products people today love. Examples are Amazon (in retailing), Facebook (*Social Media*), Google (search engines), Netflix/Spotify (media contents), which have built their business models by placing data-driven capabilities at the core of their products. Soon, those capabilities resulted disruptive changes, cornerstones impacting and modifying market boundaries and entire economy segments¹ forever.

***Robotics for Customers* initiative originates from the aim to drive this evolution into the market and to provide to any Reply customer with the same technologies and capabilities that let the over the top internet players to succeed in their business domain.**

1 As for McKinsey, 35% of what consumers purchase on Amazon and 75% of what they watch on Netflix comes from product recommendations.

ROBOTICS FOR CUSTOMERS IS HERE!



ROBOTICS FOR CUSTOMERS FRAMEWORK

Robotics for Customers constitutes a **framework designed by Reply to provide a suitable support to any business process**, ranging from the financial to the retail sectors. It mainly addresses *Personalized Services*, to be provided within digital channels, thus empowering *User Experience*, *Customer Engagement* and their *Journeys*. Foundational pillars for the framework Robotics for Customers are as follows:

Recommendation Systems deal with a particular form of intelligent information filtering, aimed to extract value by finding similarities among users and/or items and **generating a list of items tailored to end-user's preferences**.

Data sources exploited to feed the Recommendation System can be as diverse as an organization may hold, e.g., ranging from Customer portfolios, exhibited behaviors, personal interests, relevant events, etc.

Conversational Systems are intelligent machines able to understand language and conduct a **written or verbal conversation with a Customer**.

Their use is aimed at improving Customer Experience by steering interaction. Their objective is providing informed answers, assistance, help in direct channel interaction, possibly in real time.

In the context of advanced Customer interaction and engagement, Conversational Systems as Chatbots can be exploited to enhance existing touchpoints or they may even constitute a fully fledged new digital touchpoint. Advanced Chatbots go beyond basic conversations to do real work, automate workflows, scale teamwork and fully exploit business opportunities and

A **minimum viable product, including both *Conversational* and *Recommendation Systems* produces a synergy with remarkable outcomes from a Customer perspective.**

First, it boosts a new approach to *Customer Experience*, by **fostering an advanced** interaction based on reinforcement learning and data-driven techniques. Then, it **invents from scratch a new touchpoint, which is not only personalized, but also built on natural language** and agile conversation, thus far better than the old web-based interfaces.

On this basis, it enables the reinvention of any **Customer care** and **selling channel as smart and frictionless interactions.** Even more, it provides a **unified means of working out one-to-one and real time *Customer Journeys***, where advanced CRM capabilities are the tiles of an ecosystem of *Micro-services* based on smart engines and *Advanced Analytics*.

In this context, **Reply's Robotics for Customers framework allows customers to build and share a consistent body of work, potentially accelerating innovation for any Reply Customer.**

ROBOTICS FOR CUSTOMERS

is a framework based on a twofold pillar:

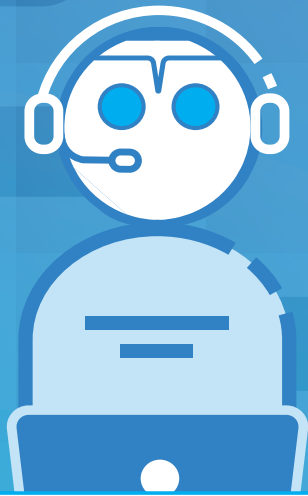
Recommendation Systems

Conversational Systems (chatbots)



ROBOTICS FOR CUSTOMERS FRAMEWORK





A new approach to Customer Experience

Intelligence not only rule-based top-down but based on data (Data Driven, Machine Learning)



A new touchpoint for Customer Engagement

Interaction with Natural Language Understanding capabilities



A new way to get interaction access channels

Customer Journey specific channel design (e.g., personality by design, zero-interface)

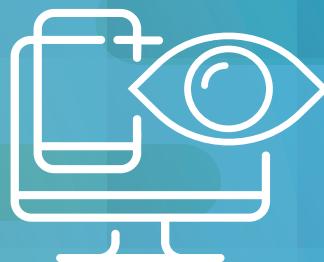


Figure 2 - Synergies between *Recommendation* and *Conversational Systems*

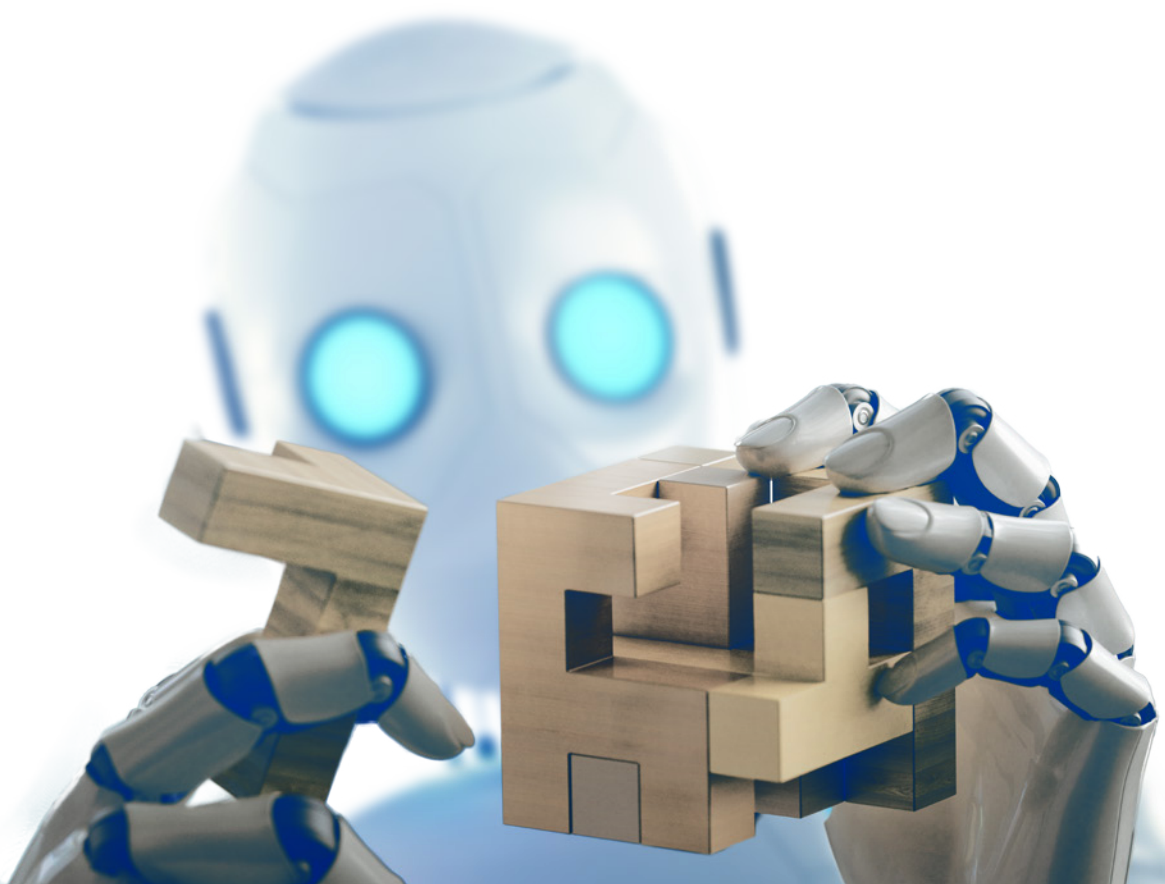
Outcomes of the initiative include building an international and cross-company task force, aimed at warming up and starting projects and initiatives at any time and in any place.

Starting from abstract modeling and the analysis of existing data sources, up to the definition of the infrastructures and the implementation of final services **the support is end-to-end.**

The Reply team provides competences, accelerators and practices **to deploy end-to-end solutions in vertical market domains.**

Accordingly, key technological partnerships are established with any of the major solution providers, both in the enterprise landscape and in the open source community.

Reply is able to realize a tailor-made solution by identifying the right technology in the right industry.



REPLY specialises in the design and implementation of solutions based on new communication channels and digital media. Reply is a network of highly specialised companies supporting key European industrial groups operating in the telecom and media, industry and services, banking, insurance and public administration sectors in the definition and development of business models enabled for the new paradigms of big data, cloud computing, digital media and the Internet of Things. Reply services include: Consulting, System Integration and Digital Services.

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