



The bridge to possible

# Cognitive Collaboration

It's the X factor in next-generation collaboration.



Budget Estimates

- Increase
- Decrease
- Stable
- Total Change

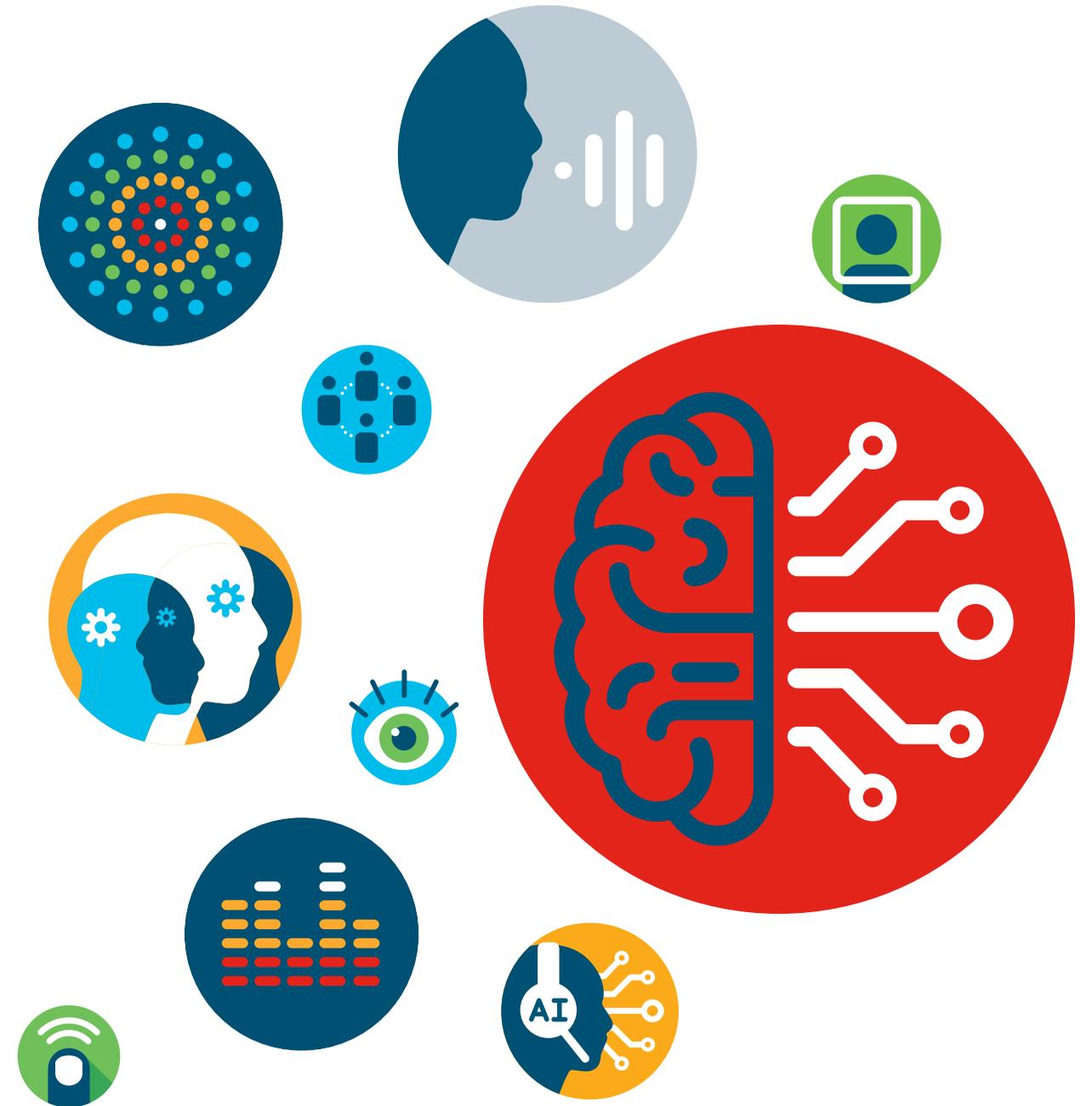


# The age of Cognitive Collaboration is now.

We are on the cusp of a major transformation in workplace productivity. A growing volume of workstreams and agile business models, combined with an explosion in connected technologies (think cloud, open APIs, and bring your own application), are making possible a new level of connected experience. It is poised to overcome significant legacy obstacles, removing friction points and breaking down silos to make the most of people's individual and collective potential in the modern enterprise.

This transformation will make it possible for people and technology to blend intelligently and seamlessly, offloading mundane tasks, paving the way for uninterrupted creativity, and enabling clarity of communication, while improving relationships between colleagues, partners, and customers.

The tools, bandwidth, big data, processing power, and energy—they're all there, ready to meld with human intelligence and ambition. Up until now, business tools have coexisted separately from the people who use them. An email app, a CRM app, or a word processing app do what they were designed to do, but they have remained static, separate, and unconnected to the collaborative process. Now these tools and the actions they perform can blend more intimately with priorities and workstreams to help people engage and connect better. They can become part of a functioning ecosystem. And the great news is, it's already here. It's called Cognitive Collaboration.



# Introducing Cognitive Collaboration

A multidimensional approach designed for the enterprise



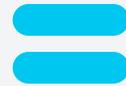
## Intelligence

- **Data**  
Sensors, bots, CRM, Internet of Things, people profiles, calendar, scheduling, meetings, social data, public data
- **Analytics**  
Identify patterns and relational clusters for individual, team, organization, and customer data to support personalization



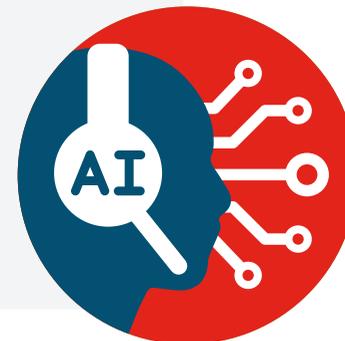
## Context

- The right information for the right people, at the right time, at the right place



## Cognitive Collaboration

- Integrated in a collaboration-enabled workflow for connected, relevant, and human experiences



Context and intelligence woven throughout all collaboration experiences

- **Fosters** human relationships
- **Enhances** customer interactions
- **Builds** high-performance teams across boundaries to make smarter and faster decisions



**Cognitive Collaboration** ensures that context and intelligence are woven throughout all collaboration experiences to foster human relationships, enhance customer interactions, and build high-performance teams across boundaries who can make smarter and faster decisions and allow you to serve your customers better.

It involves capabilities like people insights with detailed profile information in meetings, intelligent virtual assistants, facial recognition, natural language processing and conversational interfaces, noise detection and suppression, contextual real-time assistance and name labels, conversational bots, dynamic document sharing, and analytics-based routing.

## Leveraging the power of human engagement

In any working relationship, the team becomes paramount. It's where creativity, collaboration, and solutions all come together within a group to exceed the sum of its parts. Any opportunity to break down procedural silos and create deeper levels of human engagement within teams and with customers should be pounced upon, because in an age of information overload and expectation of speed, it is the quality of that experience that will cut through to generate lasting positive results. Cognitive Collaboration is based in technology, but the primary benefits are all about streamlining experiences, enhancing human engagement and business outcomes.



## Eliminating workplace pain points

The drudgery of daily work still muddies the waters of productivity and engagement. For example:

- **People and relationship insights**

Overcome challenges connecting meeting participants with relevant information. Without insights about meeting attendees, teams struggle to create engagement from the start, and participants are often distracted by seeking this information from other sources, creating less focused, less productive discussions.

- **Meetings**

Frustrating actions like searching for meeting login codes or not being able to find and share the right version of a document don't just waste time, they deflate synergy and strangle momentum.

- **Processes**

Emails, messages, and the ability to stay in touch with people on a minute-by-minute basis wherever they happen to be should represent stepping stones toward greater achievements. Instead, they starve people of context and opportunity by transforming into overload and file sprawl.

- **Customer experience**

Disconnected, frustrating, and reactive customer interactions due to an inability to access relevant contextual information quickly destroy customer loyalty.

Speed, clarity, and accessibility are the currency of innovation. To make this happen, professionals need a new breed of computing intelligence at their side. Our tools must now become part of us.

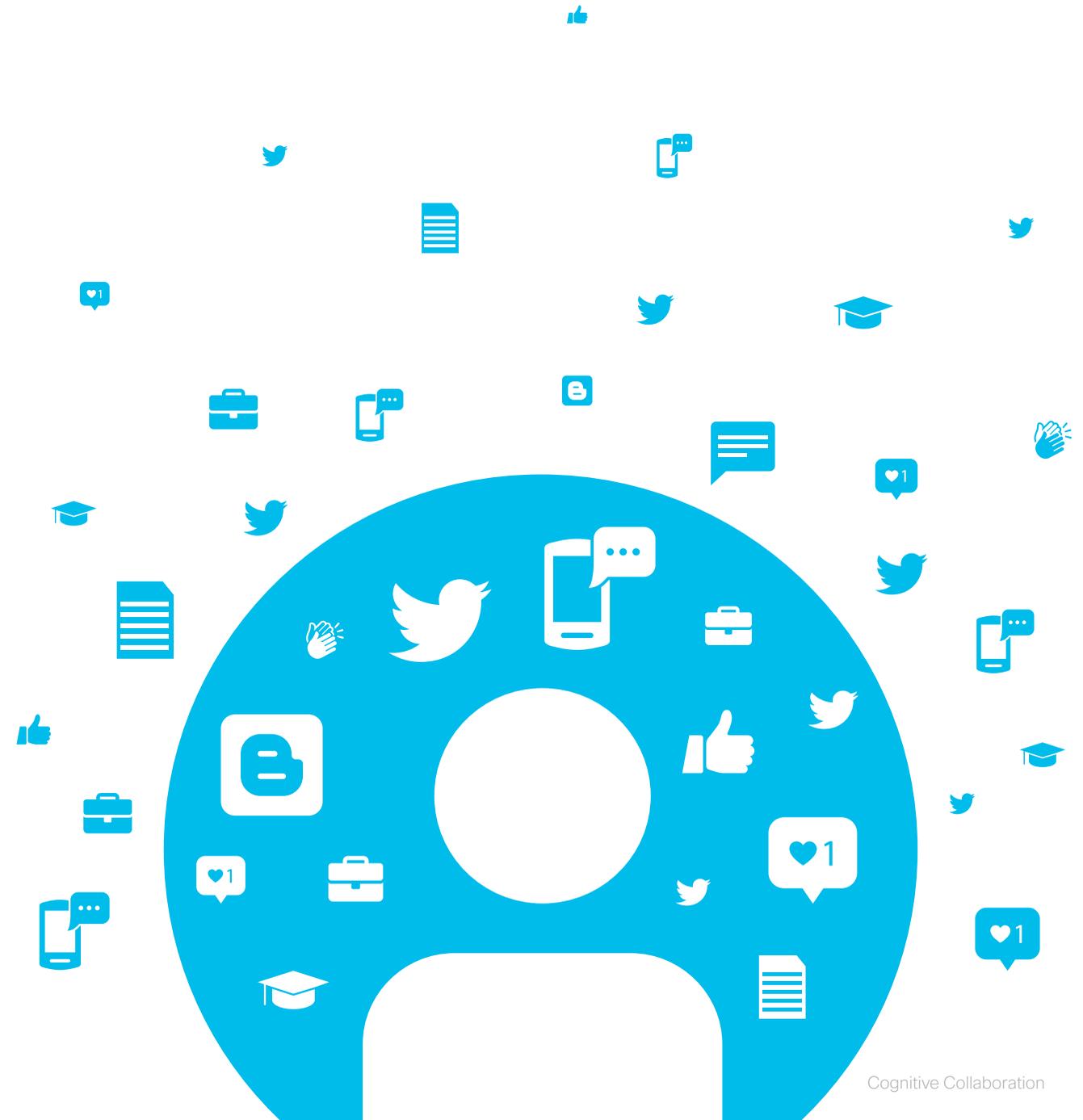
## The role of relationship intelligence and people insights

The most valuable part of collaboration is found in deeper human connection. Relationship intelligence will form the basis of successful collaboration, improving team relationships and building synergy based on trust and depth.

For these richer connections to occur, we need instant access to information about the people we meet with—and we need to have it right at our fingertips. If time weren't an issue, reviewing dozens of Google pages might suffice. Similarly, reviewing a person's LinkedIn profile might be an option, but that relies on the individual manually updating their profile. Roundtable introductions at meetings have been used for decades, but these are time-consuming and often inadequate.

The ideal solution would provide contextual insights into each individual right inside the meeting app itself. Even if that individual shares a name with hundreds of others, the app would be able to identify the correct person in your meeting. These insights need to be intelligently updated in real time and include details like job title, location, and reporting structures, as well as work history, publications, or blogs written—anything that is publicly available.

These insights need to be timely, pertinent, and helpful in adding color to the relationship. Insights that are made visible on the screen or on your device, those that move the meeting forward, elevate the experience and deepen those most vital human connections.



## The solution: Cognitive Collaboration

Cognitive Collaboration makes it easier to get tasks done in context by tapping into data sources across the enterprise and ecosystem and presenting the needed information in one seamless and intuitive place. It is context and intelligence built in to a single system. This helps businesses ensure that:

- Activities between people and technology are frictionless, human, and insightful.
- Workstream experiences make the tasks of collaborating easy and intuitive.
- Customer experiences are personalized, proactive, and responsive.

This means delivering features that allow people to hit the ground running. From the creation of people insights to enable insightful and deep working relationships with colleagues and customers, to smooth, effortless meetings, the focus and attention stays where it should be—on communicating and collaborating, not on wrestling with the tools and devices.

Cognitive Collaboration pulls everything together under a shared DNA—people insights, expertise, automation, and analytics—using technologies that are cloud based, but not cloud only, allowing companies to grow into them in accordance with existing cloud and data management strategies.



# Cognitive Collaboration essentials

Cognitive Collaboration happens when context and intelligence are woven throughout all collaboration experiences and customer interactions.

## What does that mean?

It involves a collection of artificial intelligence (AI) and machine learning (ML) technologies working together to ensure that nothing stands between people and productivity. It involves capabilities like people insights with detailed profile information, intelligent virtual assistants, facial recognition, natural language processing and conversational interfaces, noise detection and suppression, contextual real-time assistance and name labels, conversational bots, dynamic document sharing, and analytics-based routing.

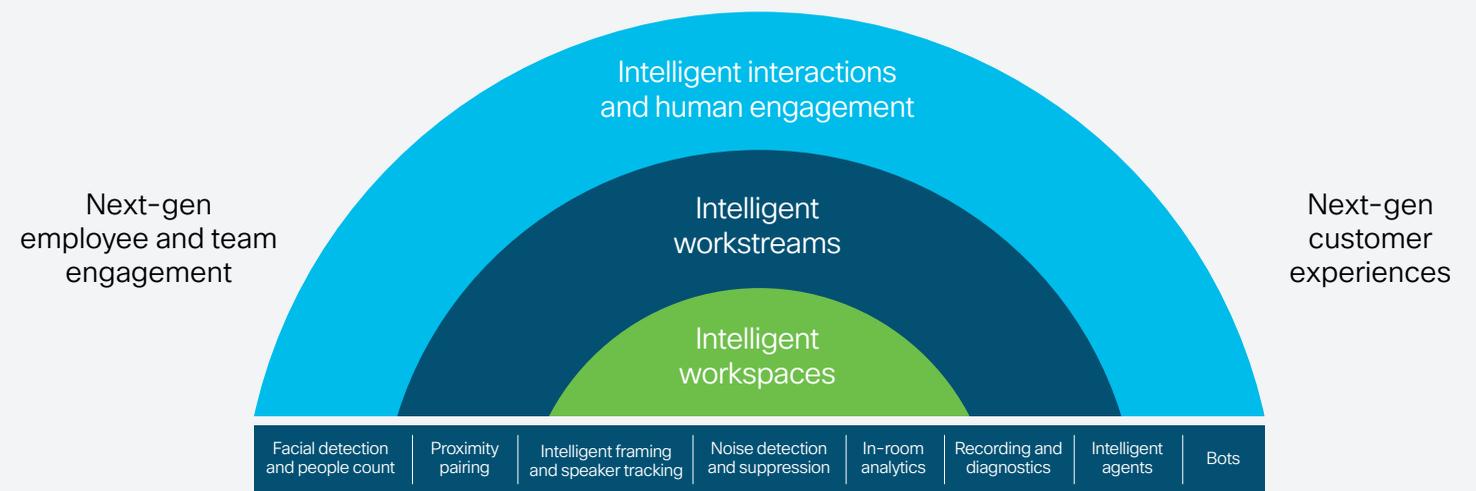
## Why are these important?

They put true cognition into the user experience. They inject intelligence, insight, and context into the collaborative process to move workstreams and interactions to their maximum potential. They give employees and teams helpful people insights to speed connection and engagement in meetings, their own intelligent virtual assistant to offload mundane tasks, and contextual intelligence to deliver better customer service.

**Cognitive Collaboration removes or takes care of momentum-stopping obstacles such as:**

- **Small individual things**  
Searching for a web conference login code or wading through endless revisions of a document
- **Larger things**  
Not having people insights and knowledge of a participant's role, background, or talents, and not knowing exactly who is in the meeting room
- **Even larger things**  
Agents not demonstrating a deep and thorough knowledge about each customer based on previous interactions

Building on the power of an integrated collaboration platform



# Creating cognitively enabled collaboration experiences for better team engagement

Cognitive Collaboration is like a form of alchemy that pairs intelligent workstreams and workspaces to forge a much-greater (and much-needed) platform for improved interaction and human engagement. Cognitively enabled collaboration experiences ensure that team members can easily connect with, and then see, hear, know, and relate to, each other. Technology becomes a bridge rather than a set of islands, and creates more opportunities for better employee and team engagement wherever work happens.



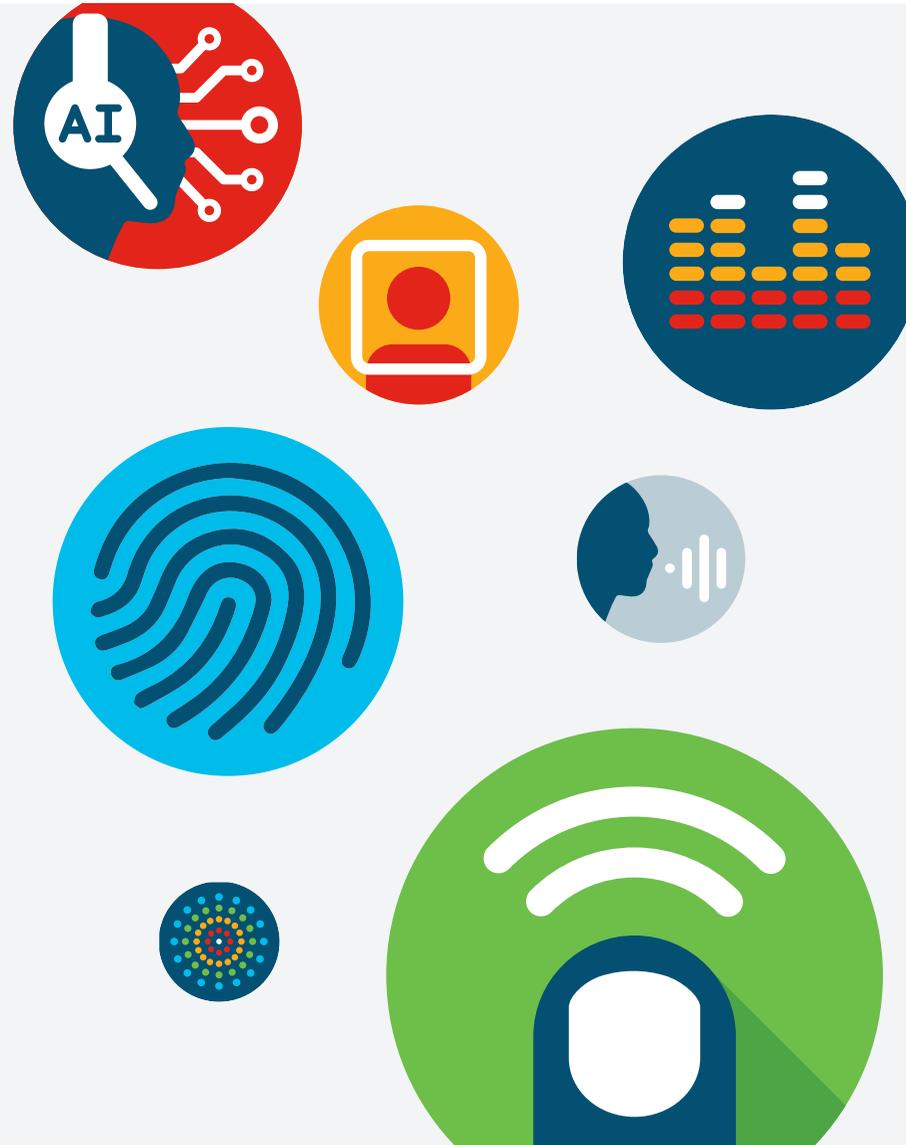
## Cognitive Collaboration:

- Delivers people insights, with detailed business profiles about individuals on teams and within meetings. Proximate awareness capabilities help every participant in a meeting or conversation with faces, names, and facts, while excluding noises and distractions.
- Improves the workplace experience by exposing the right amount of context at the right time, to the right team.
- Enables smart meeting spaces, simplifying technology interaction with conversational interfaces and options to easily see, share, and co-create content while connecting teams face to face with automated intelligent views, so that everyone is easily seen and heard.
- Ensures that there are no gaps or delays in the communication and collaboration process. Meeting schedules are coordinated virtually, and meeting artifacts are distributed efficiently to the right team, freeing people to be even more productive.
- Makes sure people can take full advantage of the intelligence and speed of their networks and computing power to support and assist their human creativity at every moment. Their tools no longer sit on the outside of the circle. They become an intimate part of their moment-by-moment work life.
- Makes the experience of work more pleasurable and time efficient. Instead of people ducking out of an online meeting, feeling frustrated because they can't find what they need to answer a customer's question in real time, or simply dreading their meeting-filled calendar, it builds a workflow that brings their expertise to the fore and uses it in a timely and engaging manner.

# Using Cognitive Collaboration tools

Cognitive Collaboration ensures that every act of communicating, collaborating, and meeting in the next-generation workplace is seamless and effortless. This includes:

- **People insights** with business profiles on an individual's role, background, and relevant organization information to facilitate deeper levels of engagement and context for teams and within meetings
- **Virtual assistants** that use conversational AI to allow people to start, join, and control meetings
- **Intelligent framing** for video web conferences that recognizes who is talking and brings them to a proper visual foreground, so everyone has a front-row seat
- **Facial recognition** that accurately identifies people and matches them to their name and relevant professional background details
- **Confirmation of who is in the meeting room** and who is engaged or not engaged in the conversation



- **Context-sensitive noise suppression**, including keyboard typing, dogs barking, sirens, and paper shuffling
- **Proximity intelligence** that acknowledges people's presence and simplifies meeting room interactions, including easy content sharing and options to view content on personal computing devices
- **Real-time meeting analytics** such as counting meeting participants and providing analytics for more efficient usage and resource planning
- **End-to-end encryption and data privacy**
- **Intelligent agents and bots** to heighten support and interaction in a personalized and contextual way

**Together, these are automated, intelligent tools that drive new value by delivering an intuitive, connected experience.**

# Creating cognitively enabled customer experiences

It is vital that the same innovations that drive collaboration in the workplace be applied to hard-won relationships with customers. The contact center is transitioning from reactive service to contextual, suggestive, and predictive customer experiences, therefore moving away from fragmented journeys and toward cohesive ones.

Studies show that by 2020, customer experience will overtake price and product as the primary influencing factor in buying decisions,<sup>1</sup> and that poor customer experiences will destroy 30 percent of digital business projects.<sup>2</sup>



This means that consumers have more power and more insight than ever before and are factoring this into their buying decisions. There is greater need than ever for contact centers to leverage the power of AI and cloud-based analytics to deliver more cognitive, personal, and proactive customer experiences.

**60%** of contact centers are using seven or more systems to interact with customers.

Source: *The Intelligent Contact Center: Get Smarter to Drive Customer Satisfaction Study*, Aberdeen, June 2018.

**40%** manually integrate data using spreadsheet software.

Source: *The Intelligent Contact Center: Get Smarter to Drive Customer Satisfaction Study*, Aberdeen, June 2018.

Contact centers must leverage data sources that enhance customer interactions. A complete view of their customers' journey allows for a better cross-analysis of patterns and correlations between customer and agent. This improves lifecycle value, helps up-sell products, provides better service, and improves loyalty.

Inefficient, reactive, and impersonal interactions must be replaced with engaging conversations that prove to customers that the company knows and understands them.

1. "Customers 2020: Future of B2 Customer Experiences," Walker.

2. Gartner: [www.gartner.com/smarterwithgartner/is-your-organization-customer-centric/](http://www.gartner.com/smarterwithgartner/is-your-organization-customer-centric/)

### Organizations must be able to:

- Use cloud-based analytics to help gain critical insights from all business sources and workflows to provide a complete picture of the customer's journey.
- Match calls to the agent with the talent that best suits the request.
- Empower agents with the needed knowledge and context to deliver exceptional customer service.
- Integrate a customer's relationship history into a proactive and productive agent-customer interaction.
- Leverage AI to provide enhanced self-service experiences to customers.
- Apply data-driven intelligence and learn to drive actionable and automated decision-making abilities throughout the customer journey.
- Fully understand each customer touch point to provide exceptional experiences that drive loyalty and improve lifetime value.



### AI can be deployed to deliver a great experience and use contact center resources cost-effectively and intelligently. This means, for example, knowing:

- When to use a bot to ask or answer standard questions and when to escalate to an agent
- How to pick out keywords in the conversation to stay on topic, and to serve the customer better and faster
- When to switch from a chat to a voice or video conversation
- How to route the call to the right agent using powerful cloud and AI-enabled tools

**Today's customers deserve no less.**

# What to look for in Cognitive Collaboration

**When setting out on a journey toward integrating Cognitive Collaboration, it is vital to identify and embrace the following deliverables:**

- People insights and business profile information to facilitate deeper connections and give you the information you need to elevate meeting experiences and enable high-performance teams
- Simple and intuitive user interfaces that incorporate AI, to streamline interactions without relearning or complex instructions
- Experiences that give employees and teams the flexibility to collaborate intuitively from anywhere, with a common experience across mobile, desktop, and meeting room environments
- Open and flexible platforms that allow businesses to adopt and integrate cloud services and data from multiple sources
- AI and analytics that track and analyze your customers' engagements, from any channel or modality, even during off-business hours, so that appropriate action can take place
- Solutions that embrace open APIs and interoperability to maximize current investments and workflows
- Enterprise-level security designed to maintain proper security policy and address regulatory and compliance concerns, while providing options for individual privacy
- Real-time-communication domain expertise to allow people to benefit from scalable, proven technology that can easily extend Cognitive Collaboration experiences across all modes of collaboration (voice, video, chat, email) at scale, as the business grows





## Take a deeper dive.

For more details on Cognitive Collaboration technologies and benefits, visit

[www.cisco.com/go/cognitivecollab](http://www.cisco.com/go/cognitivecollab).