

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

Doxee: Pioneering Digital Transformation and Customer Engagement – A Partner for Collaborative Research and Innovation

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

Summary

1.	Company Overview	3
2.	Mission and Vision for Collaborative Research & Innovation	3
3.	Core Technological Strengths, Skills, and Practices	4
4.	Doxee Platform® and Product Ecosystem	6
4.1.	Target Sectors and Impact.....	7
4.2.	Commitment to Security, Compliance, ESG, and Accessibility	8
5.	Collaboration Experience and Partner Ecosystem.....	9
6.	Key Research and Development Interests.....	10
6.1.	Potential Collaborative Project Focus Areas.....	11
6.2.	Why Partner with Doxee for Collaborative Research Projects?	13

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

1. Company Overview

Doxee S.p.A. is a multinational high-tech company, recognized as a leading provider of solutions for Customer Communications Management (CCM), Digital Customer Experience (CXM), and Dematerialization. Founded in 2001 and headquartered in Modena, Italy, Doxee has a significant European presence with offices in Milan, Rome, the DACH region (Germany, Austria, Switzerland), the Czech Republic, Slovakia, and the United States, serving over 500 customers worldwide. Doxee is listed on the Euronext Growth Milan market (DOX.MI). As an innovative SME and a certified B Corporation, Doxee is committed to technological excellence, security, and continuous evolution, consistently dedicating a significant share of its revenue (around 20-24%) to Research & Development. Doxee processes over 9 billion communications annually, underscoring its role as a trusted provider for digital transformation in both public and private sectors. (<https://www.doxee.com/>)

2. Mission and Vision for Collaborative Research & Innovation

Doxee's vision is to lead the digital transformation journey by extracting hidden value from data and making it available to organizations. We support companies and public administrations in their digital transformation path by offering new levers to compete and communicate digitally, fostering engaging and valuable experiences for customers and citizens. In the realm of European research and innovation, Doxee aims to leverage its deep expertise in R&D and its innovative technologies to contribute to strategic priorities. We seek to collaborate on projects that strengthen Europe's scientific and technological base, boost innovation capacity and competitiveness, and deliver on citizens' priorities, particularly within the digital and green transitions. Our commitment is to foster a work environment where highly skilled professionals drive forward-thinking solutions that redefine business communication and contribute to a technologically advanced and inclusive Europe.

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

3. Core Technological Strengths, Skills, and Practices

Doxee's Research & Development (R&D) department focuses on "Cloud delivery models," and the Doxee Platform® is built on a cloud-native architecture. This architecture employs containers, microservices, service mesh, and orchestration technologies. The company utilizes cloud-native practices, including DevOps and Site Reliability Engineering (SRE), to develop applications that are scalable, resilient, and manageable. These cloud-native applications are typically integrated using lightweight APIs, such as Representational State Transfer (REST). To structure its technological capabilities and operational activities, Doxee aligns its practices with the following key areas, reflective of internal Centers of Excellence:

- **Cloud & DevOps Engineering:**

- Directs the adoption and optimization of cloud computing and DevOps methodologies.
- Aims to build and maintain highly automated, scalable, and resilient infrastructure, including Kubernetes and containerized environments, to support rapid and reliable software delivery.
- Promotes continuous improvement and operational effectiveness in cloud environments through automation tools and CI/CD practices.
- The Doxee Platform® is designed for **elastic scalability** to handle high production peaks and allows for **Any-Prem deployment** (Public Cloud including AWS, GCP, Azure, and Doxee Private Cloud Doxee).

- **Platform Reliability & Security Assurance:**

- Ensures the operational integrity, performance, and security of all digital platforms and services.
- Focuses on implementing comprehensive monitoring solutions, proactive incident response and analysis, standardized logging formats, and robust security protocols.
- Includes the use of cryptography and advanced threat detection services to protect assets, ensure compliance with relevant standards (e.g., ISO/IEC 27001, ISO/IEC 27017, ISO/IEC 27018), and maintain user trust.
- Emphasizes **Security by Design** principles, including data **encryption in transit (TLS) and at rest**, Web Application Firewalls (WAF), Anti-DDoS systems, and IPS/IDS

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

systems.

- **Application & Data Platform Architecture:**

- Responsible for the design and evolution of software applications and data platforms.
- Defines robust, scalable, and forward-looking architectures, particularly for digital archiving and interactive personalized content systems.
- Ensures effective data management, analytics capabilities, and adherence to database best practices. Database implementation is determined by workloads and business logic, often within microservices-based applications.
- Doxee's implementations utilize a variety of databases, including **SQL (PostgreSQL, MySQL)** and **NoSQL databases (Key-Value Stores like Redis; Time-series Databases like Prometheus; Graph Databases like Neo4j, GraphDB; Wide-column stores like Redshift, Cassandra; Document stores like MongoDB)**.
- Utilizes **Message Queues (Kafka, RabbitMQ, Amazon SQS)** and **Object Stores (Amazon S3, Minio)**.
- Addresses seamless integration across the technology landscape via an **API-First Approach**, predominantly using **REST APIs**.

- **Software Development Lifecycle (SDLC) & Quality Excellence:**

- Supports software engineering best practices to facilitate the delivery of high-quality, reliable, and maintainable software products.
- Focuses on standardizing development processes across various programming languages and frameworks (e.g., Spring Boot, AngularJS, Vue), promoting effective coding standards and styles, managing the CI/CD pipeline, and implementing quality assurance and automated testing.
- Oversees version control, license management, and the complete lifecycle of software from conception through release and iteration.

- **Artificial Intelligence (AI) and Machine Learning (ML):** AI/ML is embedded across the Doxee Platform to enhance personalization, automation, and customer engagement. This includes applications in **Natural Language Processing (NLP)**, **voice technologies**, **AI agents (Agentic AI)**, **RAG-based data access**, **AI-driven template generation**, and

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

predictive analytics (e.g., churn prediction).

4. Doxee Platform® and Product Ecosystem

The Doxee Platform® is a comprehensive, "One Platform" cloud solution for CCM, CXM, and Document Management Systems (DMS). It empowers organizations to manage and enhance the entire customer communication lifecycle through:

- **Design:** Tools for data, template (including intelligent templates with WYSIWYG editor, versioning, and multi-format compatibility), personalized video, and workflow design. This includes **Business Designer, Data Transformation, Process Designer, Template Designer, Video Designer, Data Designer, and Customer Journey Builder.**
- **Engagement & Interaction:** Business portals and tools for customer communication, interaction, and engagement, featuring **Personalized Videos (Pvideo®), Personalized Microsites (Pweb®), Interactive Communication, and Workplace** modules.
- **Automation:** An omnichannel process engine, monitor, and workflow automation for both batch and on-demand processes. This includes the **Process Engine, Workflow Designer, and Batch Workflow Engine.**
- **Integration:** Marketplace Apps, native connectors for CRM/ERP systems (e.g., **Salesforce, SAP, Microsoft Dynamics, Zuora**), and extensive **API layers** for seamless integration with clients' existing application landscapes.
- **Analytics: Customer Data Hub, Customer Insights,** omnichannel reporting, and process monitoring to measure communication effectiveness and inform business intelligence.
- **Administration:** Tools for platform, resource, and user management, including **Platform Manager, Resource Manager, and User Manager.**
- **Digital Archiving (DMS/DA3):** Integrated capabilities for secure document storage (supporting various formats like PDF, Jpeg, Print Spool, Html), indexing, retrieval, configurable retention (standard 1 year, adjustable), and sharing channels (Mail, PEC, SFTP). Documents are associated with personalized URLs (pURLs) for direct user access.
- **Electronic Signature & Certified Communications:** Support for **Electronic Signature (FES/FEA), Electronic Invoicing, and Certified Electronic Registered Delivery Services (SERC/Q).**

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

4.1. Target Sectors and Impact

Doxee has a strong presence and deep expertise across various key sectors, enabling significant impact through digital transformation:

- **Banking & Insurance:** Enhancing customer onboarding, personalized policy management, claims processing, and regulatory communications.
- **Telecommunications & Media:** Improving customer engagement through personalized offers, interactive billing, and streamlined service communications. Clients include Fastweb, WindTre, and Sky.
- **Utilities:** Transforming utility bills into effective communication opportunities, increasing transparency, and facilitating digital adoption. Partnerships include major Italian utilities like Enel, Iren, Hera and international ones like ENGIE, Acea, EnBW, Sorgenia.
- **Public Administration & Government:** Supporting digital transformation in public services, enabling clearer citizen communication, and improving accessibility of information and services. Doxee is an AgID accredited Cloud Provider for PA services in Italy.
- **Healthcare & Travel:** Enabling personalized patient communication, travel updates, and interactive service information.
- **Retail & ICT and Transportation.**

Doxee solutions contribute to reducing operational costs, improving customer satisfaction and loyalty, ensuring regulatory compliance, and promoting sustainability through dematerialization and tools like the RINA-validated Hyperion for CO2 emission calculation.

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

4.2. Commitment to Security, Compliance, ESG, and Accessibility

Doxee places security, regulatory compliance, and service excellence at the core of its operations.

- Certifications:** Doxee holds multiple internationally recognized certifications, including **ISO 9001** (quality management), **ISO/IEC 27001** (information security), and **ISO 14001** (environmental management). The Information Security Management System (ISMS) is extended with ISO/IEC 27017 (cloud security) and ISO/IEC 27018 (cloud privacy) controls.
- Regulatory Compliance:** Adherence to strict international standards and European regulations, including **GDPR**. Doxee is recognized by key regulatory bodies such as the **Agency for Digital Italy (AgID)** for digital preservation (Conservatore Accreditato) and as a Cloud Provider for Public Administration, and is a qualified **PEPPOL Access Point Provider**. Doxee is also recognized by the Italian National Cybersecurity Agency (ACN).
- Security Practices:** Robust Information Security Management System (ISMS) and Data Protection Management System (DPMS). Regular Vulnerability Assessments and Penetration Tests are performed by certified third parties (ISO 17025). Business Continuity Management is part of the ISMS certification scope. The platform architecture incorporates **Security by Design**, including **data encryption in transit (TLS) and at rest (Infrastructure Level Encryption, Hold Your Own Key, Application Level Encryption)**, and infrastructure protection via WAF, Anti-DDoS, and IPS/IDS systems.
- ESG (Environmental, Social, Governance):** Doxee is a **Benefit Corporation** and **B Corp certified**, demonstrating its commitment to high standards of social and environmental performance, transparency, and accountability. The **Hyperion tool**, validated by RINA, measures CO2 emission reductions from digitalization projects, supporting clients' sustainability reporting.
- Accessibility:** Doxee is committed to **Universal Accessibility**. The Doxee Platform natively supports the creation of accessible content, compliant with **PDF/UA** standards for paginated documents (without external converters) and **WCAG guidelines** for HTML content (Pweb®, Pvideo®). This includes features like tagging, alternative text, keyboard navigation, high contrast, zoom resilience, and text-to-speech support for interactive formats and user interfaces.

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

5. Collaboration Experience and Partner Ecosystem

Doxee has a strong track record of collaboration with diverse entities:

- Research Institutions & Universities:** Active cooperation with academic partners such as the University of Modena and Reggio Emilia (DBGroup for Intelligent Database Management; SECloud for data management, security, and cloud computing; CRIS for IT security and risk prevention), the University of Bologna (DISI - Department of Computer Science and Engineering for AI, Big Data, etc.), and the University of Milan (Law Department for socio-economic and legal aspects of technology). Doxee has also collaborated with SMEs and research organizations like RE:Lab (User Interfaces and User Experience) and MechLav (Technopole of Ferrara, mechatronics and digitalization).
- Technology and Business Partners:** Doxee collaborates with leading technology providers and system integrators such as AWS, Google Cloud Platform, Microsoft Azure, Salesforce, SAP, Informatica, Adobe, Postel, Zuora, RGI, and financial service partners like Scrive.
- Funded Projects:** Doxee has experience in running and participating in research and innovation funded projects, including closed projects like C2X Toolkit (platform reengineering), DXP (Digital Experience Platform development), TETI (homomorphic encryption and blockchain for storage), and iX Studio (interactive video self-studio), and running projects such as CDMH (Customer Data Management Hub for AI) and PWD (P Web Designer with AI for SMEs).

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

6. Key Research and Development Interests

Doxee is actively pursuing R&D in areas that are pivotal for future digital transformation and societal benefit. Our main areas of interest for collaborative projects include:

- **Communication Aspects:** Extending Doxee's offering in the digital space with personalized interactive video and microsites, focusing on **Customer Experience (CX), User Experience (UX), Digital Engagement and Communication, Customer Relationship Management (CRM), and Customer Journey Mapping.**
- **Technological Aspects:** Enhancing the Doxee platform's capabilities in **data treatment and customer interaction.** This includes **Advanced Analytics, ChatBOTS, Data Management Platforms, IoT with Communication-related aspects, and Artificial Intelligence applied to Engagement and Communication.**
- **Cross-Cutting Thematic Areas for Research:**
 - **Artificial Intelligence (AI) & Machine Learning:** Advanced AI applications for communication, personalization, automation, data analysis, and decision support. This includes **Generative AI, Agentic AI, Explainable AI (XAI), and AI Ethics.**
 - **Cybersecurity & Data Protection:** Innovative solutions for enhancing data security, privacy-preserving technologies, risk analysis, and threat intelligence in complex digital ecosystems.
 - **Big Data & Advanced Analytics:** Leveraging big data for deeper customer insights, predictive modeling, customer journey optimization, and real-time decision-making.
 - **Blockchain Technologies:** Exploring applications of blockchain for secure data/document exchange, traceability, and trust in digital interactions, particularly linked to Doxee's core services.
 - **Cloud Computing & Edge Computing:** Advancing cloud-native technologies, serverless computing, and exploring the intersection of cloud and edge for distributed applications.
 - **Internet of Things (IoT) & Communication:** Integrating IoT data streams with communication platforms to enable proactive and context-aware interactions.
 - **Sustainability & Green Digitalization:** Developing and promoting solutions that support environmental sustainability, such as tools for measuring and reducing carbon footprint and dematerialization.
 - **Human-Centric Digital Transformation & Accessibility:** Ensuring that digital solutions are inclusive, accessible, and enhance user experience for all citizens, leveraging AI to bridge accessibility gaps.

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

6.1. Potential Collaborative Project Focus Areas

Doxee has identified several innovative project concepts that could form the basis of collaborative research initiatives. These ideas aim to develop new services or extend the Doxee Platform's capabilities:

- IncluCom: Inclusive Communication Through AI:** This project seeks to develop AI-based solutions that ensure inclusive communication, bridging accessibility gaps for reading and understanding complex content across languages. Through advanced natural language processing, machine learning, and voice technologies, these tools would adapt and simplify text, supporting individuals with visual impairments, dyslexia, and other cognitive challenges to foster seamless and equitable access to information. **Keywords:** *full accessibility, AI for inclusion, NLP, digital divide, assistive technologies, universal design.*
- AIComFlow: Composable AI Communication HUB:** AIComFlow is a composable, natural-language-driven communication hub using advanced AI agents, domain-specific knowledge bases, and robust analytics to streamline multi-channel interactions between users and enterprises. Leveraging RAG-based data access for personalized messaging, it aims to empower customers to design and deploy communication processes rapidly, while providing open technologies for seamless integration. **Keywords:** *Agentic AI, RAG, multi-channel communication, interoperability interface, bi-directional communication, data and infrastructure.*
- Templification: AI-Driven Automated Template Generation for Cross-Channel Communications:** Project Templify leverages cutting-edge AI to automatically generate streamlined, reusable templates for cross-channel communications—including PDF, email, SMS, RCS, and micro-websites—while ensuring brand consistency and accessibility compliance. It aims to empower organizations to rapidly produce engaging, inclusive, and cost-effective communication strategies. **Keywords:** *AI template generation, cross-channel generation, template layout improvement, accessibility by design.*
- LifeHub – Your One-Stop Solution for a Faster, Simpler Digital Life:** A government-endorsed platform designed to consolidate important digital documents (bills, usage data, contracts) into one secure, easy-to-use space using advanced CCM technology. It supports digital transformation by making official processes more accessible and transparent for citizens. **Keywords:** *digital government, e-services, citizen-centric platforms, document management, self-service portals.*

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

- **SwiftComm – The Self-Service Platform for Next-Generation Customer Engagement:** Reimagines how organizations manage customer communications by bringing together advanced process automation, dynamic data modeling, and rules-driven workflows into a single cohesive system, enabling personalized, event-triggered messaging and orchestrated multi-channel campaigns for SMEs. **Keywords:** *easy self CCM platform for SMEs, AI automation for simple use cases, customer engagement.*
- **Customer JournAI: AI-Powered Customer Journey Orchestration:** Aims to switch from purely configured event rules to an outcome-oriented approach where AI mechanisms understand concepts of customer satisfaction and over-communication to compose communications that maximize satisfaction. **Keywords:** *event-based agentic AI, customer journey optimization, AI customer satisfaction modeling.*
- **AAA - Analytics Driven AI Communication Agent:** An agent using AI-based data analytics insights and optimization techniques to formulate objectives (e.g., maximize customer experience, reduce churn) rather than just rules, performing value-based communication decisions. **Keywords:** *NBA/NBO (Next Best Action/Offer), AI personalization, value-based communication, churn reduction.*
- **Customer Care Agentic AI:** An internal project idea aimed at improving processes by creating an Agentic AI system for assisted management of inbound Service Desk requests, integrated with the Doxee Platform, internal knowledge bases, and ticketing systems.
- **Automatic Creation of CCM Communications from Word Documents:** An internal project concept for improving processes by using LLM / Agentic AI for template migration and creation from existing documents.
- **Automatic Cybersecurity AI Assessment:** An internal project idea for assisted verification of security postures and assessment management using AI.

Doxee can contribute its expertise in data management planning for projects, including handling sensor data for AI platforms, and provide tools (like personalized videos and microsites) for effective communication with end-users and project stakeholders.

Version: 2025 (v1.0 June 25)		
Author: Doxee Spa	Number of pages: 13	
Confidentiality level: Restricted		

6.2. Why Partner with Doxee for Collaborative Research Projects?

Doxee offers a compelling partnership for ambitious research and innovation projects:

- **Proven Innovator:** A recognized innovative SME with a strong track record in R&D and bringing cutting-edge solutions to market.
- **Technological Leadership:** Deep expertise in cloud-native technologies, AI, data management, CCM, and CXM.
- **Collaborative Spirit:** Extensive experience working with academic institutions, research organizations, and industry partners on national and European projects.
- **Strategic Alignment:** R&D interests and project ideas are well-aligned with key European priorities for digitalization, societal challenges, and industrial competitiveness.
- **Market Access & Impact:** Strong presence in key vertical markets across Europe, facilitating the dissemination and exploitation of project results.
- **Commitment to Openness & Standards:** Dedication to API-first design, interoperability, and adherence to international standards for accessibility and security.
- **Agile and Experienced Team:** A highly skilled team of professionals capable of contributing to all phases of a research project, from conception and design to development, testing, and dissemination.
- **Focus on Real-World Solutions:** Emphasis on developing practical, impactful solutions that address tangible needs for businesses and citizens.

Doxee is eager to explore collaborative opportunities that push the boundaries of digital communication and customer experience, contributing to a more innovative, efficient, and inclusive digital future for Europe.