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CGI MaEVATM

Inspection procedures and maintenance checks in mobile conditions Remote support and specialized assessments

01/2016



Project genesis

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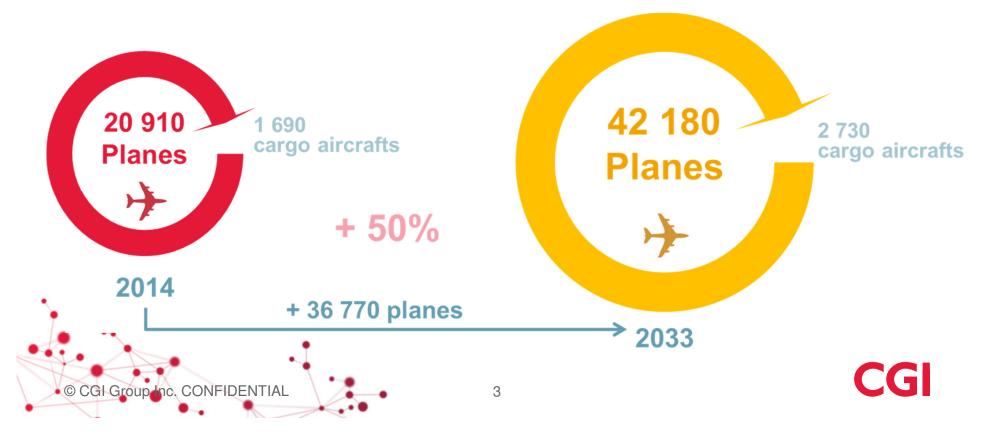


- Aerospace Valley is the most significant innovation « pole de compétitivité » in France. Most of the french aeronautics industry players are members
- Once a year, they launch an innovative idea program for the aeronautics industry
- MaEVA was presented as such in december, 2014 and certified by « Digital Aquitaine » in June 2015



Aeronautics industry situation

- More and more planes flying
- Aircrafts getting more and more complex
- Their maintenance requires high level skills
- Planes' downtimes represent a huge economic concern for airlines



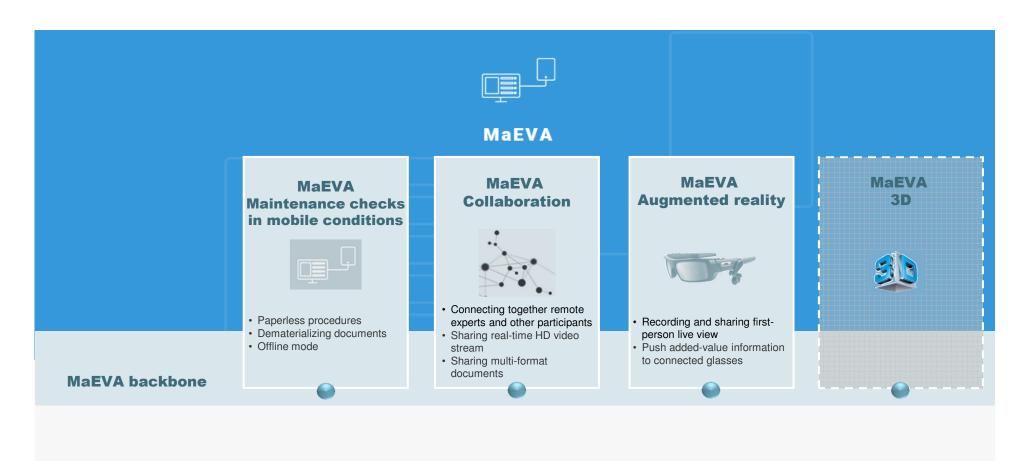
Main goals of CGI MaEVA

- Make inspection processes more reliable and improve the working environment of maintenance operators
- Speed up diagnostic operations by bringing in a real-time and remote support feature
- Strengthen the efficiency of technical manipulations with remote support
- Decrease asset (e.g. aircraft, heavy machinery) downtimes
- Archive / record maintenance operations to provide complete traceability
- Create and continuously enhance a knowledge base





CGI MaEVA modules





CGI MaEVA Features



MaEVA Maintenance checks : Inspection procedures and maintenance checks in mobile conditions

- Dematerialization of documents (inspection procedures)
- Framework allowing for creation of an interactive layer composed of dynamic fields upon a digitalized document (= procedure)
- Statistics based on custom parameters
- Barcode and flashcode support for fast procedure retrieval
- Offline mode

MaEVA Collaboration: Connecting together remote experts and other participants

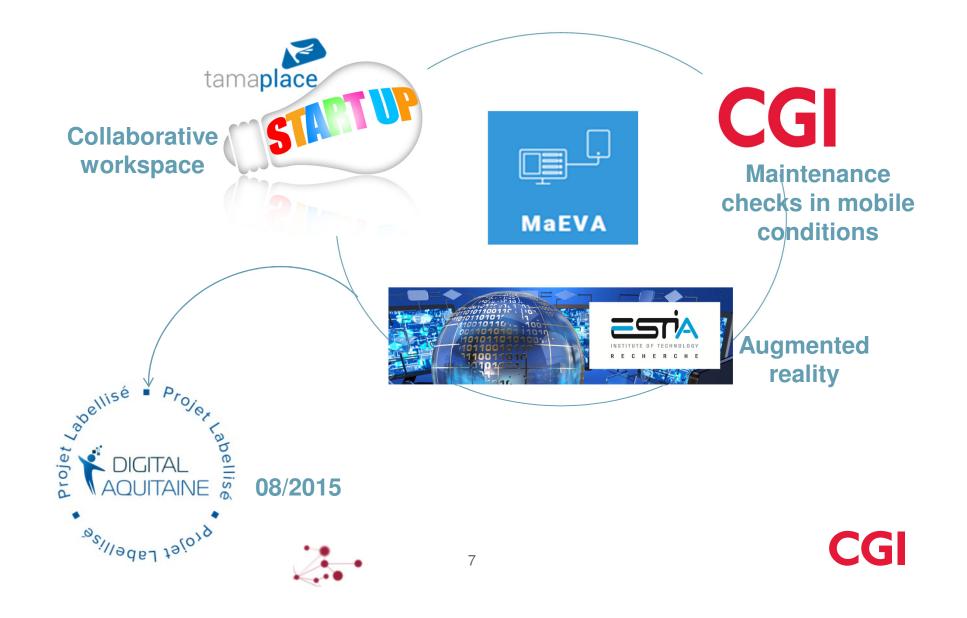
- Sharing live HD video streams from cameras, connected glasses, webcams and any device from any connection media (WiFi, USB, etc.)
- Sharing of and working on multi-format documents in real time
- Chat between peers, annotations on documents, and general collaborative tools (post-its, whiteboard, etc.)
- Record a meeting/maintenance operation and replay it afterwards

MaEVA Augmented Reality: Recording and sharing first-person live view

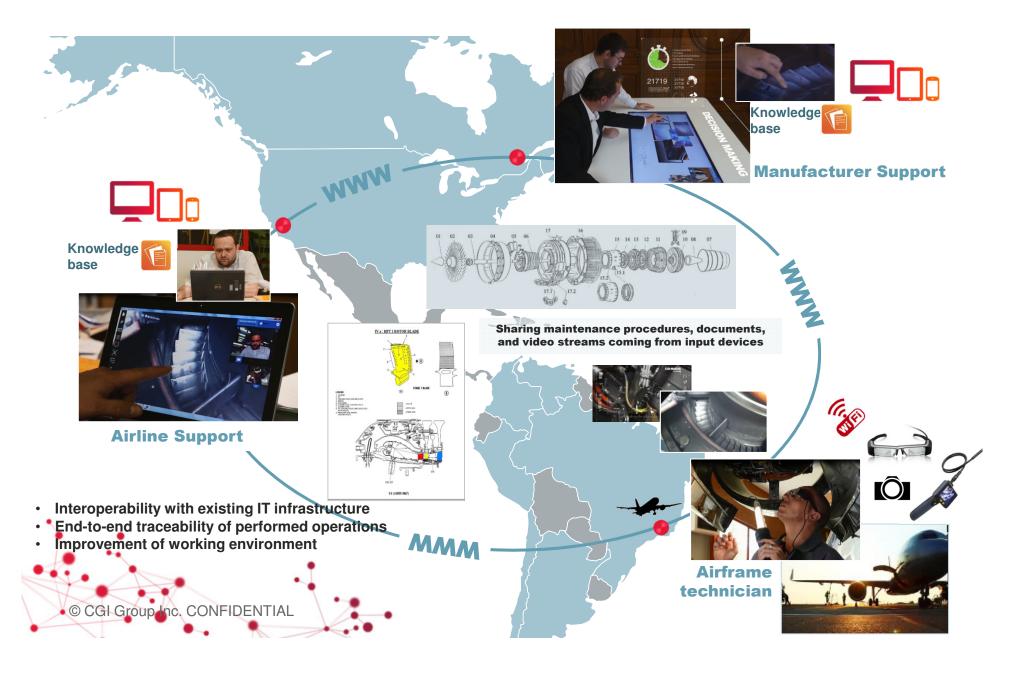
- Push added-value information to connected glasses for visual assistance
- Display of contextual procedures



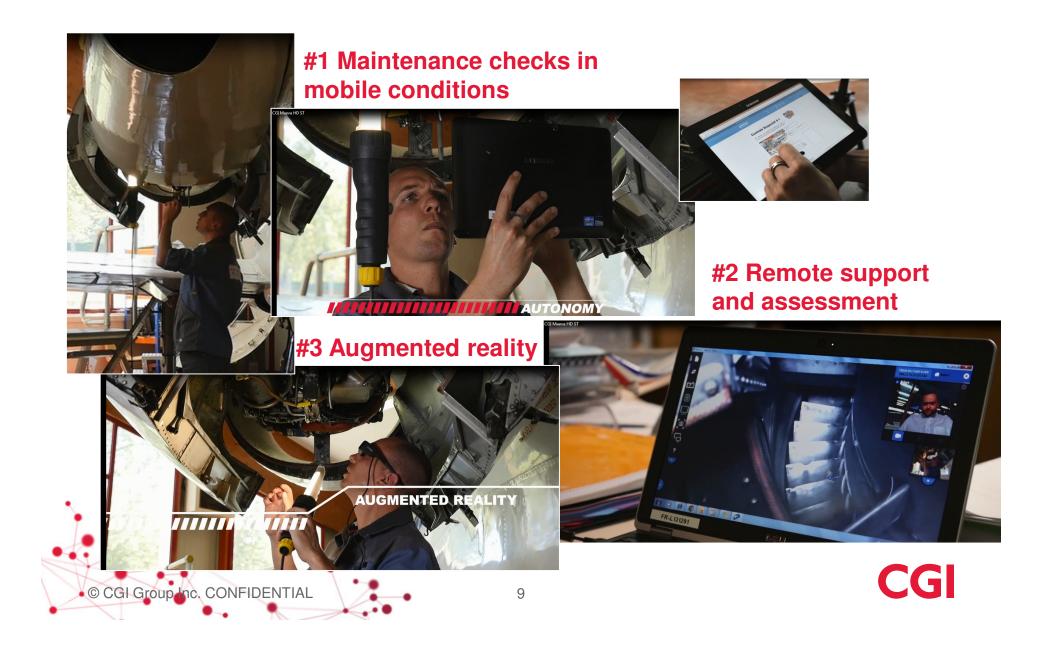
MaEVA Partners



Use case in aeronautical maintenance



What CGI MaEVA brings in



Integrated collaborative workspace

Sharing multi-format Connecting experts and documents in real time other participants in order to (document, picture, video, solve an issue audio) **Collaborative workspace insight Pointers** Manuals 8 SUPPORT 76680ac43fbbc0c5 **Technician augmented** point-of-view • 10 -Video inlavs Technician point-of-view 0 114.5 Perandition Lo. North Control of Contr Blueprints ? White board Post-It Highlighting tools Encrypted data Zoom features Archiving / Recording data CG CGI Group Inc. CONFIDENTIAL 10

CGI MaEVA – A value-adding solution



Dematerialize documents and unfold maintenance procedures on mobile devices





Support the maintenance operator in real time

Creation of a collaborative workspace to share the operator point-ofview and push the required documents to solve the issue



Base de connaissance

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Pushing added-value information to the operator's field of vision (augmented reality)

End-to-end tracking of performed operations

Take snapshots, record/replay whole procedures





Interact with existing third-party information repositories

ERP, Knowledge base

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Our commitment to you

We approach every engagement with one objective in mind: to help clients succeed



La force de l'engagement^{MD}