

Intelligent Document Processing Enterprise IDP Solutions

> Captova Technologies Inc June 2023

SECTION 1

INTRODUCTION



PROBLEM

In the world of IDP, there is currently a huge unmet demand for processing private & confidential documents, be they medical documents, invoices, or top secret government documents. Most of the existing IDP systems are web-based solutions and they do not offer the level of privacy, speed and security required.

SOLUTION

Captova AI offers two bare metal IDP platforms which have the key elements required for private processing. Privacy-Accuracy-Speed-Security (P.A.S.S)

Captova Submarine & Captova Hyper



Captova offers Two Bare Metal Enterprise IDP Solutions

CCPTOVA SUBMARINE

On-Premise Solution for Top-Secret Documents with ultra-high Privacy-Accuracy-Speed-Security (P.A.S.S)



Hybrid Solution - On-Prem & Cloud for Regular Documents with Privacy-Accuracy-Speed-Security (P.A.S.S)



Captova AI Submarine vs Captova AI Hyper

What's the Difference?

Captova AI Submarine and Captova AI Submarine have a similar architecture. Both are bare metal solutions except for the fact that Captova AI Hyper is a hybrid solution connected to a network so it can access AI Models residing in the cloud or it can itself reside as a bare-metal server in the cloud. The Submarine on the other hand is totally self-isolated, off-the-grid and not connected to any network.

Captova Submarine it does not need to be connected to a network because the Al Models reside within the Submarine itself, giving it an ultra-high level of security.

For privacy and security reasons, document archives for both versions reside within the hardware. However, the customer can always backup the archives to a storage facility of his choice (on-premise or in case of Captova Al Hyper a secure cloud repository)



Captova has the AI technology to capture data from almost any type of document.

Structured or unstructured, data is captured in real time.

Scaling is possible because customers can deploy an unlimited number of Captova Al Workstations accessing the same Al Models required for their specific use case.





Captova AI provides Intelligent Document Processing services for most document types across various verticals, too many to list here. Shown below are some of the most popular ones.

Verticals	Description
Accounts Payable	Invoices & Purchase Orders
Sales Tax Compliance	Government VAT/GST compliance
Fiscal Compliance	Business and Corporate Digitalization for BI and Audits
Supply Chain - Logistics	Shipping Documents & Procure-to-Pay artifacts
Income Tax Compliance	Tax Forms & Tax Returns
Insurance	Insurance Policies & Medical Claims
Healthcare	Electronic Healthcare Records (EHR) - HIPAA
Government	Classified Documents, Law Enforcement, Gun Control & other sectors
Legal	Searchable Legal Document Management



"P.A.S.S" is Captova's Strength

Privacy – Accuracy – Speed – Security

"P.A.S.S" with Bare Metal is our unsurpassed edge.

Touchless; no human eyeballs; total data privacy & security.

Highly accurate sub-second data capture for almost any kind of document.

On-Premise or Hybrid Solution

"Any sufficiently advanced technology is indistinguishable from magic" – Arthur Clark



Captova AlgoGen

Captova's Machine Learning Platform for Generating Al Models

AlgoGen is Captova's proprietary Machine Learning Platform for training and generating new Al Models for documents.

Al Models can be created by Captova's AlgoGen experts if Submarine users are willing to provide fake copies of confidential documents along with their requirements. But for those users who wish to create their own Al Models can do so with our Captova AlgoGen.

AlgoGen is a supervised AI training tool which gives the user more control over their data requirements and allows users to be creative.



Recommended Hardware for Captova Submarine or Hyper



Dell Precision 7920 Tower Workstation



System76 Thelio Major



Lenovo ThinkStation P620 Tower







Recommended Hardware Specifications For Captova AI Submarine or Hyper

Dell Precision 7920:

NVIDIA T1000, 4 GB GDDR6, 4 mDP; 32 GB, 4 x 8 GB, DDR4, 2933 MHz, ECC

System76 Thelio Major:

AMD Ryzen Threadripper 3990X, up to 256GB of RAM, NVIDIA GeForce RTX 3090

Lenovo ThinkStation P620:

AMD Ryzen Threadripper Pro 3945WX, 16GB of RAM, NVIDIA Quadro P620





Captova Operating System Requirements fedoro



Security-Enhanced Linux

Captova Al Workstations (for either Submarine or Hyper) run on Linux, and our distro of choice is Red Hat or Fedora. It is accompanied by the SELinux security module which provides an additional level of security.

Security-Enhanced Linux (SELinux) is a Linux kernel security module that provides a mechanism for supporting access control security policies, including mandatory access controls (MAC). It allows administrators to have more control over who can access the system. It was originally developed by the United States National Security Agency (NSA) as a series of patches to the Linux kernel using Linux Security Modules (LSM).



Robo-Assistants for Rapid Process Automation (RPA)

- Gartner predicts that by 2028, 50% of employees will have Robo-Assistants.
- Valuable data needs to be extracted from massive stacks of paper and PDFs.
- Rapid Process Automation (RPA) is a necessity in effective IDP.
- Captova Al Workstations are invaluable Robo-Assistants for IDP



SECTION 2





BAREMETAL

OFF-THE-GRID
Isolated IDP Appliance



What is Captova AI Submarine?



Captova Al Submarine is special version of Captova Al. It is designed for top secret documents where privacy and security are of the highest concern.

All documents and data remain on premises. Captova itself cannot see customer's data or documents.

The Submarine can configured as a highly customizable bespoke solution for almost any type of top secret document.

- ✓ On-premise data capture
- ✓ For top secret documents
- ✓ No network connection
- ✓ Ultimate privacy & security
- √ Tamper-proof black box
- ✓ Water-tight, self-contained
- ✓ Data output only on premises

The Ultimate PASS Solution

P – Privacy

A-Accuracy

S - Speed

S – Security



Military-Grade IDP System

Captova Al Submarine is one of the only known military-grade secure on-premise IDP system. Private, Accurate, Fast, Secure.

Secure enough to be used by...

Central Intelligence Agency, Defense Intelligence Agency, Department of Energy, Department of Homeland Security, Department of State, Department of the Treasury, Drug Enforcement Administration, Federal Bureau of Investigation, National Geospatial-Intelligence Agency, National Reconnaissance Office, National Security Agency, Office of the Director of National Intelligence

Captova Submarine Endorsed by Top IDP Authority

"While I have not yet personally tested Captova, if it works as well as the demonstration suggests on the wide range of documents that we see in the broader business world, then it has much potential. The idea of a "Submarine" product that can maintain privacy is unique I believe and Captova's relatively small processor requirements make it a very feasible solution in many environments".

Harvey Spencer harvey@xamcor.com Tel: +1-516-906-4199 June 6th 2023



https://www.linkedin.com/in/xamcor/

https://xamcor.com/?page_id=75

Harvey Spencer, Co-Founder and Partner

Founded in 1989 and based in metropolitan New York, Harvey Spencer Associates (now owned by InfoSource CH) became the leading analyst company focused on analyzing the worldwide \$32bn market for capture software - key technologies to classify, convert and extract data from unstructured multi-channel inputs. The company's data is relied on by major vendors to identify market direction and size, trends and technologies that affect electronic capture and recognition. Clients are a "who's who" of global Information Management companies who relied on the company's data and strategic advice to identify market direction and size, trends and technologies that affect unstructured data. Since leaving Info-Source, Harvey has focused more on Xamcor M&A and sits on a number of advisory boards in the ECM industry.

Harvey is a founding co-owner of Xamcor, advising on Information Management sector developments as well as providing a deep understanding of technology direction and fits.



Captova Submarine Considered an "IDP Appliance"

Alan Pelz-Sharpe Founder of Deep Analysis
aps@deep-analysis.net
Dan Lucarini Lead Analyst – IDP at Deep Analysis
dan@deep-analysis.net | +1 978 877 7915



Deep Analysis

https://www.deep-analysis.net/idps-very-interesting-week/

IDP's very interesting week

Artificial Intelligence, Customer Experience, Digital Process Automation, Digital Transformation, Document Processing, IDP, Intelligent Process Automation, RPA By Dan Lucarini / February 23 2023

https://www.deep-analysis.net/

"The IDP Appliance? We love discovering the innovation that bubbles up from the smallest IDP players who are looking for a beachhead to land and expand. We met the founder of Captova, a small Canadian IDP vendor who is hustling to find a niche in the increasingly crowded IDP market. (With Captova, our exhaustive vendor list is now up to 310). Captova is marketing a "bare metal, off the grid" IDP appliance loaded with its pre-trained document AI models. What a cool idea for the CIA, the medical records world, or anyone else who needs the best and brightest document AI for data extraction, but doesn't want their documents or data leaving the premise."



Captova Submarines inside SCIF Sites

Sensitive Compartmented Information Facility (SCIFs) are used as a site for sensitive and confidential information to be discussed or shared. They are utilized by government and private entities to protect information. A SCIF could be a secure room or data center that shields against electronic surveillance and prevents data leakage of sensitive information. There are several security concerns to be addressed when building a SCIF:

Physical Security and Hardening | Acoustic Controls | Visual Controls | Alarms and Access Controls | Electronic and TEMPEST* Security

*TEMPEST stands for "Telecommunications Electronics Materials Protected from Emanating Spurious Transmissions". It is a U.S. National Security Agency (NSA) specification for protecting against data theft through the interception of electromagnetic radiation.

Captova AI Submarines are designed for secret IDP Processing inside SCIF Sites.



Captova Submarines inside SCIF Sites



Sensitive Compartmented Information Facility (SCIFs) are used as a site for sensitive and confidential information to be discussed or shared.

Captova Al Submarines are designed for secret IDP Processing inside SCIF Sites



Where SCIFs & SAPFs Are Used

SAPFs are most often used by the Department of Defense (i.e., the intelligence organizations of the U.S. Navy, U.S. Army, U.S. Air Force, U.S. Marine Corps and U.S. Coast Guard) to house Special Access Programs, or SAP, while SCIFs are used by the Intelligence Community for handling Sensitive Compartmented Information, or SCI. Here are the Intelligence Community, or IC, elements that use SCIFS:

Central Intelligence Agency

Defense Intelligence Agency

Department of Energy

Department of Homeland Security

Department of State

Department of the Treasury

Drug Enforcement Administration

Federal Bureau of Investigation

National Geospatial-Intelligence Agency

National Reconnaissance Office

National Security Agency

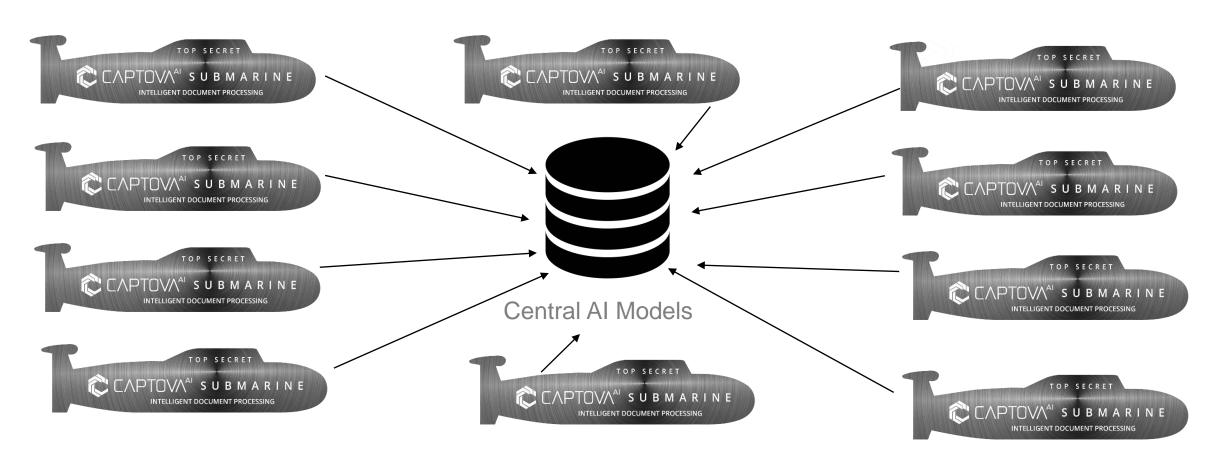
Office of the Director of National Intelligence

There is a high demand for processing top secret documents are these sites. Could be hundreds of bespoke Captova Submarines deployed in side them.



Virtually Unlimited Scalability for Secret Agency

Unlimited Number of Captova AI Submarines
Can be connected to an internal central repository of AI Models





From Paper to Data in Seconds

On Premise | Touchless | 100% Privacy & Security | High Speed & Accuracy

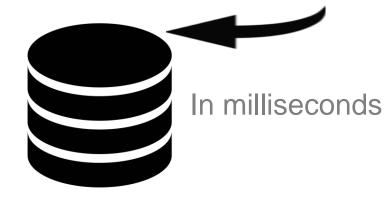
We can integrate Captova Al Submarines with almost all scanners







Privacy,
Accuracy,
Speed &
Security



On-Premise Customer Repository



Secure Transmission of Updates to Submarine

How Software Updates are made to the Submarine

- 1. Captova sends an updated Submarine Docker Image to Customer.
- 2. Customer receives it inside a separate workstation for temporary storage.
- 3. Customer transfers the Docker image to Submarine via USB drive or secure LAN





USE CASES

Government Top Secret Documents

- With Captova Al Submarine, it is possible for government agencies to process secret and highly confidential classified documents on premise.
- Al Models reside inside the Submarine, so it provides the highest level of security possible in an IDP solution.
- There is only a one-way traffic to the Submarine, and that is for software updates via customers secondary server. Nothing leaves the Submarine except documents and data for the on-prem user.
- This ultra-high level of security can be provided for secret agencies such as DoD, DHS, HHS, CIA, FBI, NSA, and MI6.



Examples - Confidential & Top Secret Documents

- F-701 Activity Security Checklist
- SF-311 Agency Security Classification Management Program Data
- SF-312 Classified Information Nondisclosure Agreement
- SF-702 Security Container Check Sheet
- SF-700 Security Container Information (Information Only)

- SF-709 Classified Media Label
- SF-705 Confidential Document Cover Sheet
- SF-708 Confidential Media Label
- SF-704 Secret Document Cover Sheet
- SF-707 Secret Media Label
- SF-703 Top Secret Document Cover Sheet
- SF-706 Top Secret Media Label
- SF-710 Unclassified Media Label
- SF-711 Data Descriptor Label



Examples of Information Security & Top Secret Documents

- (U//FOUO) DoD 5105-21-M-1 Self-Inspection Checklist
- (U//FOUO) SCIF Inspection Checklist (Expanded Version)
- (U) SF Form 700 Security Container Information
- (U) SF Form 701 Activity Security Checklist
- (U) SF Form 702 Security Container Checklist
- (U) SF 703 Top Secret Cover Sheet
- (U) DIA Label 22 Top Secret- TK Cover Sheet
- (U) DIA Label 21 Top Secret- SI/TK Cover Sheet
- (U) DIA Form 181 Gamma Controlled Cover Sheet

- (U) DIA Form 567 SI Cover Sheet
- (U) DIA Form Top Secret HCS/NOFORN
- (U) DIA Form Top Secret HCS/SI/NOFORN
- (U) DIA Form Top Secret HCS/TK/NOFORN
- (U) DIA Form Top Secret HCS/SI/TK/NOFORN
- (U) DIA Form Secret HCS/SI/TK/NOFORN
- (U) DIA Form Top Secret HCS/TK
- (U) DIA Form Secret HCS/NOFORN



There is no better solution for such secret documents than IDP systems like Captova Al Submarine. At the moment there isn't any known competitor which can do this.



Examples of Confidential Healthcare Documents

- Documents CMS 1500 and 1450s/UB-04 Forms
- ADA Dental Claim Forms
- Patient Registration Form
- Health Surveys
- Physician Order Form
- Laboratory Test Requisition Forms
- Lab Results
- Supporting documentation such as doctor's orders, patient records, receipts, identity documents, and income statements



SECTION 3





BAREMETAL

HYBRID IDP Solution Cloud + On-Prem



Captova AI Hyper

Two Powerful Innovations Converging

Captova Al innovation has set a new milestone in terms of speed and accuracy. The Bare Metal Cloud innovation is the latest trend in the cloud computing space. The combination is a perfect play for Captova Al Hyper.

Captova AI Hyper can be deployed over Bare Metal on Premises or Bare Metal in the Cloud

CAPTOVA AI HYPER ON A SINGLE TENANT

BARE METAL SERVER IN THE CLOUD

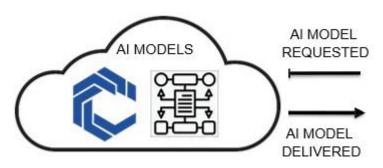
CAPTOVA AI HYPER ON A SINGLE TENANT

BARE METAL WORKSTATION ON PREMISES





Architectural Overview of Captova Al Hyper Sub-Second Processing







CAPTOVA AI MODELS

Captova's Cloud contains only AI Models (Algos). The actual data capture takes place on the customer's private baremetal workstations or private bare-metals in the cloud.

So Captova does not store any documents or extracted data except minimal publicly available static data for indexing the documents

CUSTOMER'S WORKSTATION

Captova's Hyper Workstations can reside on-prem or as a Bare Metal Server in the Cloud.

All documents & data stay in customer's workstation ensuring total privacy & security

Data can be captured and transmitted to ERPs in real time, but can and also be saved on the local machine.

CUSTOMER'S ACCOUNTING

API's from Captova Hypera can be filtered to deliver the exact data required by customer's targeted data warehouses, repositories, ERPs or accounting systems.

API's can be configured to automatically transmit captured data to ERPs for final review & posting so as to eliminate or minimize human-in-the-loop (HITL) time and expense.

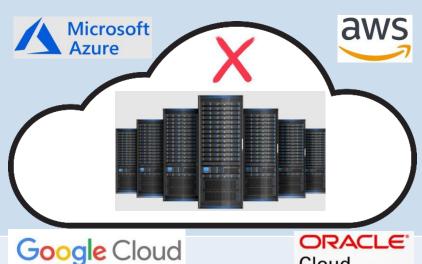


Captova AI Hyper Hybrid Solution

Multi-Tenant Cloud Servers in Cloud Services Providers

Captova on Single-Tenant Bare-Metal Server in the Cloud

Captova on Single-Tenant Bare-Metal Workstation on Premises



Cloud

Due to the architecture of Captova Al Hyper, it is not available on virtualized multi-tenant cloud servers provided by cloud hosting platforms such as AWS, Azure, Google and Oracle



Captova Al Hyper is available to customers who are willing to deploy our software on secure single-tenant bare-metal servers on their own cloud services provider.



Captova Al Hyper is available to customer who are willing to deploy our software on their secure single-tenant bare-metal servers on premises as work Stations



Captova AI Hyper Sub-Second Paper-to-Data

Hybrid | Touchless | 100% Privacy & Security | High Speed & Accuracy

We can integrate Captova Al Hyper with almost all scanners.

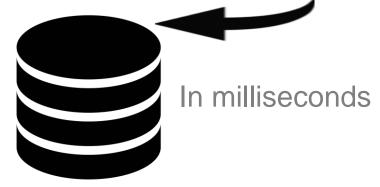
Documents



IBML ImageTracDS



Privacy, Accuracy, Speed & Security



Cloud or On-Premise Customer Repository

CAPTOVA^{AI}
HYPER

USE CASES



Financial Planning & Analysis (FP&A) Digital Initiatives

Gartner surveys show that CFOs, controllers, and heads of financial planning and analysis (FP&A) are focused on digital initiatives in 2022 that will lay critical groundwork for an autonomous future—where finance operations are increasingly driven by hyper automation, artificial intelligence (AI), blockchain, and quantum computing, reducing the need for human intervention.

But FP&A can never be fully accurate without accurately captured data from vast repositories of corporate documents.



Banking & Financial Services (BFS) Use Cases

Customer onboarding / Know Your Customer (KYC): Automate extraction of data from documents such as passports, IDs, credit reports, bank statements, utility bills, etc. to verify customer identity during the onboarding process.

Mortgage Processing: A mortgage application can involve hundreds of pages of supporting documents, W-2s, pay stubs, bank statements, etc. Automate extraction of decision-making data from loan applications to reduce approval time and improve customer satisfaction.

Commercial Lending: Commercial lending involves many more documents due to the amount of money involved. Lenders can automate the extraction and verification of key decision making documents to reduce costs and speed up the processing of commercial loans.

Bereavement: Automate the processing of documents for account transfers after the death of a client.

Account Management Forms: Automate the processing of account opening, closing, or change of consent forms.

Remediation Document Processing: Automate the processing of client documents during compliance.

Bank Statement Processing: Intelligently extracts data from bank statements to support processes such as expense categorization, lending assessment, know your customer (KYC), anti-money laundering (AML) or fraud.



Banking & Financial Services (BFS) Documents

- Documents
- Pay Stubs
- Tax returns
- Bank statements
- Rental agreements
- Home value assessment reports
- 1003 Mortgage Application Form
- HUD-92900B Form
- Form VBA26-0551

- Death certificates
- Trust documents
- Wills
- Marriage certificate
- Images
- Passports
- IDs
- Mortgage Statements



Procure-to-Pay (P2P) & Order-to-Cash (O2C)

Captova can process all documents related to P2P and O2C Cycles





AP Invoice Processing Use Cases

Invoice Processing: Automating manual invoice processing can lower costs by 85% or more. Automatically extract decision-making data from invoice and purchase orders (POs) and compare the invoice amount and payment terms against open PO to help automate payment.

Duplicate Invoice Identification: Enterprises end up spending 1-2% of all their invoice processing costs remedying duplicate payments. One of the common reasons for duplicate payment is duplicate vendor names in accounting systems (e.g., one variant with an apostrophe, and another without). Use fuzzy matching and geo-location technology to correct OCR errors and identify the correct vendor.

Jeopardy Invoice Identification: Extract payment terms from invoices and match them against terms specified in PO to identify invoices about to miss early payment discounts and/or about to incur late payment fees/penalties. AI/ML can help resolve different payment terms to standard company terminology.

Invoice Email Automation: Automatically classify emails to account payable into various categories (new vendor invoice, invoice payment status, invoice overview reminder, supporting documents, etc.).



Manufacturing Documents

Automate the processing of shipping and receiving documents such as the bill of lading in manufacturing facilities and warehouses.

- Purchase Orders
- Bills of Lading
- Packing List
- Proof of Delivery
- Customs Forms



Supply Chain Documents

Many supply chain processes remain manual, such as various document processing tasks, visual goods and equipment inspections, and safety protocol monitoring and enforcement. These processes are good candidates for automation, and are often primary blockers to meaningful digital transformation for supply chain and logistics operations. Additionally, completing these tasks manually is time-consuming and error-prone, leading to a worse outcome at a greater expense.

- Commercial Invoices
- Bills of Lading (BoL)
- Packing Lists
- Air Waybill (AWB)
- Sea Waybill (SWB)
- Dock/Warehouse Receipts
- Proof of Delivery (POD)



Transportation & Logistics Use Cases

Streamline Shipment Tracking:

Extract decision-making data using AI to automate the processing of shipping and receiving documents such as Bill of Lading, Packing Lists, and Proof of Delivery (POD) for shipment tracking.

Streamline Customs Clearance:

The movement of goods in the global supply chain involves the processing of customs forms, many unique to specific countries involved. Automate customs forms data extraction to improve accuracy and efficiency while reducing costs associated with the global movement of goods.

Shipment damage detection:

Cargo received by logistic companies must be checked at arrival. This includes checking the correctness of quantity, volume, product type and labels, the functionality of the barcodes, and if the cargo is damaged. Automate damage detection using Al/ML to analyze product images/videos at each key point in the shipping and delivery process

Transportation & Logistics Documents

- Commercial Invoice Processing
- Bill of Lading Processing
- Airway Bill Processing
- Customs Forms Processing
- Packing List Processing
- Certificate of Origin
- Certificate of Free Sale
- Shipper's Letter of Instruction (SLI)
- Letter of Credit

- Air Waybill (AWB)
- Sea Waybill (SWB)
- Dock/Warehouse Receipt
- Insurance Certificate
- Export License
- Dangerous Good Declaration
- Packing List
- Proof of Delivery
- Customs Forms



Insurance Documents

Business owners policy (BOP) application processing:

Automate the processing of supporting documents such as payroll data, tax returns, etc. during the processing of the BOP application.

First Notice of Loss (FNOL) processing:

Automate extraction of decision-making data from first notice of loss form.

Claims supporting document processing:

Automate extraction of decision-making data from supporting documents such as images of products.

Insurance Documents:

- FNOL
- Receipts Inspection report
- Pay stubs
- Tax returns
- Acord 25 Form -Certificate of Liability Insurance (COI)



HR Employee Onboarding

Employee onboarding involves conducting background checks such as identity verification, address verification, reference checks, and more. Enterprises can streamline the onboarding process by automating the processing of IDs and documents.

- Passports
- Driver's License
- Utility Documents (address verification)
- W-9 Form Resumes
- Passports
- Driver's License



Real Estate Documents

- Sale Deeds
- Possession Letter
- Property Tax receipt
- NOC
- Rent Agreement
- House Rental Contract
- Rent Agreement
- Sublease Agreement
- Lease Agreement

- Completion Certificate
- Encumbrance Certificate
- Tenant Lease Agreement
- Sale Agreement
- Payment Receipt
- Allotment Letter
- Occupancy Certificate
- Lease Contract
- Property Assessment Documents



US Tax Forms

Form 1003

Form 1040

Form 1040 Schedule C Form

1040 Schedule D Form

1040 Schedule E

Form 1099-DIV Form 1099-G

Form 1099-INT

Form 1099-MISC

Form 1099-NEC

Form 1099-R

Form 1065

Form 1120

Form 1120S

Form SSA-89

Form SSA-1099

Form W2

Form W9

.....many others



SECTION 4

Appendix



Scalability

Since our AI Models for document issuers need to be created only once, Captova does not have to rely on generic models that need to be retrained from time to time, a very costly ML computing resource.

We can maintain the same high-level performance regardless of number of users, whereas our competitors can have a bottleneck when traffic is heavy because each customer has to access their common generic Al models in cloud and these generic models have to re-crunch afresh the same document each time. Most of our competitors do all their ML training and re-training in the cloud and their users have to pay for their heavy compute services each time. In other words, they have to re-invent the wheel each time.

Furthermore, there is no limit to the number of Captova Workstations or Captova Submarines which can be deployed globally, so this give Captova unparalleled scalability.

A global distributed solution to for a large number of Submarines for top secret documents is made possible by connecting all of them to customer's own VPC, but only for Al Models, not for documents and captured data. It is a perfect solution for a confidential IDP Solution.



Privacy & Security

We never store customer's documents or extracted data in our database; all the data resides on in their own Bare Metal Workstations or servers.

To create an AI model for a given document, we only need one sample from a customer; and even that they can provide with fake sample data (typically altered with Photoshop). Many of our competitors need at least five sample documents for their ML systems to work.

We don't store any information about the user other than their username, email and password.

As such we don't keep track of any analytics so we don't do any form of reporting.

Performance

Captova is one of the few IDP technologies which offers a highly accurate, synchronous real-time data capture service. In Captova, single-page or multi-page PDF documents are typically analyzed and extracted in seconds (in some cases less than a second) independent of the number of fields and line items. Multi-page documents are also captured in seconds. What slows down our processing is when large PDF document require compression. But generally our performance, speed, and accuracy is better than most of our competitors.

Captova 90th Percentile Response Time: 2 seconds

(The 90th percentile of a dataset is the value that cuts off the first 90 percent of the data values when all of the values are sorted from least to greatest)

Captova Mean Response Time: Less than 1 second

(Mean Response Time is the average of all values)

We can provide the same degree of performance regardless of the number of users, while our competitors have a bottleneck to access the models, since all their training is done in cloud.



Captova AI Real-Time Performance

Captova AI Performance————————————————————————————————————			
1 - Imaging & OCR	0.043	5 - Key-Value Pairs	0.127
2 - Document Identified	0.022	6 - Date Conversions	0.005
3 - AI Model Invoked	0.127	7 - Line Items	0.033
4 - Schema Applied	0.001	8 - Cross-Checks	0.001
USA-INV-ChamproDOC.pdf			
Data Captured in 0.360 Seconds			
Captured on 2023-04-17 at 14:15:54			

Performance metrics shown above in our Captova Al Submarine are in milliseconds (each millisecond being one-thousandth of a second). In this example, data from a 5-page invoice with 140 line-items was captured in 360 milliseconds. Our software keeps track of time in microseconds and rounds it to the nearest millisecond.



Captova – No Known Submarine Competitor

Captova AI Submarine is currently the only known "IDP Appliance" among 310 IDP companies to offer a bare-metal off-the-grid on-prem IDP solution for highly confidential documents.

Most of our competitors are cloud-based where privacy and security cannot be guaranteed.

- ABBYY Vantage
- AIDA
- Ancora (ancorasoftware.com)
- Appian
- Automation Anywhere
- Automation Hero
- AWS Textract
- Azure Form Recognizer
- Base64.ai
- docBrains (Moonoia)
- DocSumo
- EdgeVerve

- Fortra
- Google Documents Al
- Grooper (bisok.com)
- Haystac Idago (haystac.com)
- Hypatos
- Infrrd
- Klippa
- Kodak Alaris
- Kofax
- NanoNets
- Nividous
- OpenText

- Parascript
- Parashift
- Rillion
- Roboyo
- Rossum
- Scalehub
- Semantic Pro (cortical.io)
- Super.ai
- UiPath
- Veryfi
- Xerox
- Xtracta



ESG-Friendly Green Software

Environment, Social and Governance (ESG) strategies are critical for companies wishing to do their part in minimizing their carbon footprint to fight climate change. Adopting Captova AI as their IDP platform enables them to do just that.

Most of Captova's competitors use Deep Learning (DL), Artificial Neural Networks (ANN) and Natural Language Processing (NLP) which generate a high carbon footprint. All such providers of IDP solutions admit having high compute costs and energy consumption, hence they generate a bigger carbon footprint.

Captova on the other hand uses its own proprietary Machine Learning technology which is extremely inexpensive to operate. Our Al Models are very lean and efficient run and to create. Compared with most of our web-based competitors, our carbon footprint is minimal. Not only that, but Captova's power consumption is probably among the lowest in IDP solutions.

And the irony is that despite consuming so much power, most of our competitors simply aren't able to produce results as accurate as Captova.

Globally, there are billions of documents requiring IDP each month, and if this process is not handled responsibly, it could seriously affect climate change.



Sustainable Software Engineering (SSE)

Captova was designed on the three pillars of Sustainable Software Engineering (SSE) - Ecological, Economic and Social. SSE relies on environmentally friendly practices which in essence cause less environmental damage. Captova espouses some, but not all, of the eight relevant principles of Sustainable Software Engineering. 1-Carbon; 2-Energy; 3-Carbon Intensity; 4-Embodied Carbon; 5- Energy Proportionality; 6-Network Efficiency; 7-Demand Shaping; 8- Optimization.

Captova's SSE design enables a shift from "always-on" to "on-demand" which essentially saves on electricity usage and improves carbon efficiency. Captova's "on-demand" servers, workstations consume minimal amount of energy when being used by enterprise customers at their own premises. As a result, the amount of computational power Captova uses is a fraction of what our top competitors are using.

Captova's Potential Customers & Partners

- Government & Secret Agencies
- Business Processing Outsourcing (BPO) Companies
- Shared Services Organizations (SSO)
- Accounting Systems Intuit, SAP, Oracle, Odoo, MS Dynamics, Xero NetSuite etc
- Accounts Payable applications -P2P, O2C
- All Logistics & Supply Chain Service Providers
- Manufacturers of scanners Kodak, Canon, HP, Epson etc
- Companies seeking Intelligent Document Processing (IDP) solutions





