

# PARTNER FOR YOUR NEXT-INNOVATION

# **NEXT SOLUTION LAB IN A NUTSHELL**

**50+ STAFF** Worldwide

90% developers with an average of 4+ years of experience

Corporate Headquarter in Bangladesh



1 Branch office in Canada



1 Branch office in Japan



1 Branch office in USA

### 90% Staff

with a bachelor's or master's degree

### 100% Dev/Tester/BA

with English proficiency

**50+ PROJECTS** 





Established in 2019, **5+** years of experience in IT outsourcing industry



Founded by **Industry Experts** with **20+** years of experience



Among **TOP AI Innovator** in Bangladesh & Japan



**Among TOP Offshore Development** company in Bangladesh



Serving Globally, Including clients from the Fortune 500 companies.

50%

AI Research & Innovation

25%

15%

10% Internal

Offshore Software Development

Data Analysis/

Annotation

Next Solution Lab

# **MISSION & VISION**





### **Vision**

To emerge as a premier institute within the industry, pioneering not only research but also the practical implementation of research outcomes into tangible products and software.



### **Mission**

Our mission is to deliver the best Software Solutions to every challenge our clients face, enhancing efficiency and quality through comprehensive Research and Development endeavors.

# **WHY US**





# **Cost Efficiency**

We specialize in affordable development, transforming your ideas into reality through the creation of Proof of Concepts (POCs) and Minimum Viable Products (MVPs).



# **Extensive Company Experience**

Our seasoned professionals bring precision, reliability, and innovation, offering tailored solutions aligned with your business needs, all backed by a strong commitment to excellence.



# **Expert Employee Team**

Our experts combine extensive knowledge and creativity to bring your ideas to life, blending imagination with technical expertise to achieve your business goals.



### **Streamlined Work Process**

As proactive innovators, we assess your business needs to deliver dynamic solutions. Our streamlined processes transform challenges into opportunities with speed and precision.



# **Commitment to Quality**

We are dedicated to delivering top-tier solutions that meet your specific business needs. Count on us for excellence and reliability in every project.



### **Trustworthiness**

Trust is the foundation of our business. We build strong client relationships through integrity, transparency, and consistent performance, ensuring you can rely on us for all your project needs.

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# **OUR CORE BELIEF**

### **Innovation:**

Encouraging creative thinking and pushing boundaries to develop new and better solutions.

### **Customer focus:**

Putting customers at the center of decision-making processes, understanding their needs, and delivering products that exceed their expectations.

### **Agility:**

Embracing change, adapting quickly to market demands, and being responsive to customer feedback and evolving technologies.

### **Quality:**

Commitment to delivering high-quality software through rigorous testing, continuous improvement, and adherence to best practices.

### Work-life balance:

By emphasizing work-life balance, the company demonstrates its commitment to supporting employees' overall well-being, which can lead to higher job satisfaction, increased productivity, and better retention rates.

### **Integrity:**

Upholding ethical standards in all interactions, being transparent with customers and stakeholders, and maintaining trust.

### **Social responsibility:**

Being environmentally and socially responsible, contributing positively to the communities in which the company operates, and considering the broader impact of its actions.

# **OUR EXPERTISE AT A GLANCE**

















# LIST OF OUR OFFSHORE SERVICES

### 1. Development Strategies

We give advices and customize development strategies based on client's various needs.

### 2. Proof of Concept

- UI/UX
- Business analysis

We create the visualization of your product to validate the idea and gain investors' attention.

### 3. Minimum Viable Products

We create the first version of product with just enough features to be usable by early customers who can then provide feedback for your future product development.

### **4. Full Stack Software Development**

Our Full Stack Software Development ensures seamless functionality across platforms for our solutions.

### 5. Mobile Application (PB)

We create profitable apps with the cuttingedge tech stack, exceptional UI/UX design, and innovative features.

### 6. Testing Service (PB/OSDC)

Enhance your project's development lifecycle with meticulously planned and polished quality assurance workflows.

### 7. Staff Augmentation (OSDC)

You can have a dedicated remote office inside our office. We offer IT staff across various roles and levels to meet all your resource needs.

### 8. Machine Learning

We deploy ML technologies to turbocharge your business solutions.

### 9. AI Consulting and Custom Solutions

Tailored AI expertise and bespoke solutions

for your business success.

### 10. Generative AI / Multi Modal

Our software maximizes business potential with advanced AI and multi-modal capabilities.

### 11. Natural Language Processing

We deliver NLP solutions for seamless communication and insights.

### 12. Computer Vision

Helps machines recognize objects and classify images.

# **OUR DEDICATED TEAM**

### **Data Scientists**

Who build machine learning and big data pipelines along with analysis capability to support data driven decisionmaking and drive business growth.

### AI Engineers

Experts in advanced AI technologies, including deep learning and generative AI, crafting next-gen applications, and ensuring the delivery of high-performance AI solutions

### **Software Engineers**

Building and maintaining scalable, high-performance software solutions, ensuring robust architecture and seamless user experiences.

### **Testing Engineers**

With years of experience on testing methodologies and techniques to find critical bugs and vulnerabilities.

### **IOT & Robotics**

Who design & implement intelligent systems integrating IoT devices & robotic automation, along with advanced AI capabilities.

### UI/UX Designer

Creating intuitive user interfaces and enriching user experiences, ensuring seamless interactions and exceptional aesthetic quality across digital platforms.

### **Data Annotation Team**

Labeling and preparing highquality datasets, ensuring accurate and reliable data for machine learning and AI models.

# **TECHNOLOGY WE USE**

### Front-end / Back-end / Full stack

- ReactJS
- HTML
- Go

- Angular
- Javascript
- Python

- VueJS
- NodeJS
- Ruby

- PHP
- .NET
- C++

### **Android / iOS**

- Java Kotlin Object-C
- Flutter
- React native
   Swift
- Unity3D

### **Database**

- Oracle
- MongoDB
   SQL Server
- MySQL
- DynamoDB PostgreSQL
- Firebase

### **DevOps**

- Git
- CI/CD Jira
- Docker

Marven

Jenkin

Gradle

### **Cloud Professional Technologies**

- AWS
- Heroku
- Azure Google Digital Ocean
- Cloud
- IBM Cloud

### **Artificial Intelligence**

- TensorFlow
- LlamaIndex

Pytorch

- OpenCV
- Scikit-Learn
- Pandas

Langchain

Numpy

# **BUSINESS CONSULTATION**

### **PROOF OF CONCEPT**

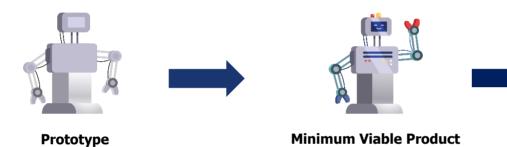
**PROOF OF CONCEPT (PoC)** helps you demonstrate idea's feasibility and practical potential. Depending on requirements, the process of creating a PoC includes **BUSINESS ANALYSIS** and/or **UI/UX DESIGN**. It goes through these stages:

- 1 Problems definition
- 1 Problems mapping to possible solution
- 1 Scope of PoC discussion
- 1 Mockup
- 1 Visual design
- 1 PoC finalization



# **MINIMUM VIABLE PRODUCT**

**MINIMUM VIABLE PRODUCT** (MVP) is a version of a product that allows us to get a general understanding of the final product and learning how to use it.





**Final Product** 

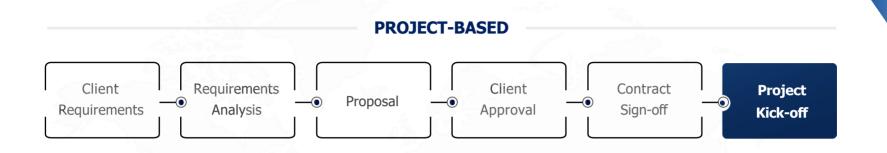


# **MAJOR DOMAIN WE COVERED**

- Ecommerce System
- ERP Solutions
- BPO
- IoT
- · AR & VR
- AI for Robotics
- AI Based Safety & Security System
- AI Based Digital Transformation
- Self Driving Vehicle
- Generative AI Application
- Private LLM



# **OUR ONBOARDING PROCESS**



### **OFFSHORE DEVELOPMENT CENTER**



# **TARGET MARKET**



- **Silicon Valley** and tech hubs like San Francisco, California
- Seattle, Washington (home to Microsoft and Amazon)
- Boston, Massachusetts (renowned for universities and research institutions)
- New York (finance and technology sectors)
- Major tech cities: Austin, Texas, Chicago, Illinois, Los Angeles, California

# 😛 Eur

## **European Union**

- United Kingdom(London, Cambridge, Oxford)
- Germany (Berlin, Munich)
- France (Paris)
- Netherlands (Amsterdam)
- **Sweden** (Stockholm)



### **Asia-Pacific**

- Singapore (tech startups and innovation hub)
- Japan (Tokyo, Osaka)
- South Korea (Seoul)
- · China (Beijing, Shanghai, Shenzhen)



# **Middle East**

- United Arab Emirates (Dubai, Abu Dhabi)
- Arabia (Riyadh, Jeddah)
- Qatar (Doha)
- Kuwait (Kuwait City)



# **Other Potential Markets**

- Canada (Toronto, Vancouver)
- **Australia** (Sydney, Melbourne)
- Brazil (São Paulo)
- South Africa (Johannesburg, Cape Town)

**SNEXT** 

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# TARGET INDUSTRIES



# **CASE STUDY**



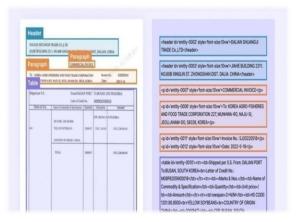
### INTELLIGENT DOCUMENT UNDERSTANDING

A technology that uses advanced deep learning algorithms to analyze and interpret document elements like text, tables, handwritten notes, seals, and images. This technology transforms image data, such as scanned PDF files of documents, while maintaining the document layout and table format.

#DeepLearning

#LayoutAnalysis

#Project-based



Resources

6 talents

Duration

Start date: 2021

**Technical stack** Python, OpenCV, Pandas, TensorFlow, PyTorch

### **Business needs**

- Robust document analysis module.
- Adaptive machine learning feedback module.
- Seamless integration with enterprise systems.

### **Our solutions**



A system to accurately recognize the layout structure of a document.



Enhancing performance by training AI.

### **Benefits & Values**

- Transforms unstructured data into actionable insights.
- ✓ Reduces manual processing, boosting productivity.
- Handles complex document layouts with ease.
- ✓ Enhances decision-making with timely, precise data.
- ✓ Integrates seamlessly with existing systems for improved workflow.

### **Key features**

- # Advanced Document Layout Recognition.
- # Accurate text and table extraction.
- # Handwritten text recognition.
- # Image, logo, seal, noise recognition.

### **Scope of work**



Coding



Testing



Maintenance

### INTELLIGENT OPTICAL CHARACTER RECOGNITION

Intelligent Optical Character Recognition is a technology that leverages advanced deep learning algorithms to convert various types of documents, such as scanned paper documents, PDFs, or images, into editable and searchable data.

#Project-based

#DeepLearning

#OCR

Store #05666 3515 DEL MAR HTS.RD SAN DIEGO, CA 92130 (858) 792-7040 Register #4 Transaction #571140 Cashier #56661020 8/20/17 5:45PM

wellness+ with Plenti Plenti Card#: 31XXXXXXXXXXX4553 1 G2 RETRACT BOLD BLK 2PK 1.99 T SALE 1/1.99, Reg 1/4.69 Discount 2.70-

Ref # 05639E Entry Method: Chip

**OCR Receipt Example** 

### Output

Store #056663515
DEL MAR HTS,RD
SAN DIEGO, CA 92130
(858) 792-7040Register #4 Transaction
#571140
Cashier #56661020 8/20/17
5'-45PMwellnesst+ with Plenti
Plenti Card#: 31XXXXXXXXXXX4553
1 G2 RETRACT BOLD BLK 2PK 1.99 T
SALE 1/1.99, Reg 1/4.69
Discount 2.70-

1 Items Subtotal 1.99 Tax .15

Total 2.14

\*xMASTER\* 2.14

MASTER card \* #XXXXXXXXXXXXXX548S

Apo #AA APPROVAL AUTO

Ref # 05639E

Entry Method: Chip

### Scope of work



CODING Front & Back-end

**Developers** 



**TESTING**Testers



Developers, Testers **Resources** 12 talents

**Duration** 

Start Date: 2021

**Technical stack**Python, OpevCV,
TensorFlow, BERT

### **Key features**

- # Document layout recognition.
- # Table information recognition.
- # Advanced text recognition.
- # Seamless system integration.

### **Business needs**

- · Comprehensive document preprocessing capabilities.
- Support for various document types (invoices, receipts, etc).
- Seamless enterprise systems integration module.
- User-friendly interface for easy adoption and usability.

### **Our solutions**



Developing a system to accurately extract information from various types of documents.



Enhancing performance by training AI.

### **Benefits & Values**

- Automates extraction, ensuring accuracy.
- Reduces costs and boosts productivity significantly.
- Facilitates seamless digital document transformation.
- Rapid, accurate processing of large volumes.
- Provides timely insights for informed decisions.

### **AUTOMATED DATA EXTRACTION FROM DOCUMENTS**

An advanced platform that automates the extraction and analysis of textual data utilizing Natural Language Processing (NLP) transforms raw information into actionable insights to enhance decision-making and operational efficiency.



### **Business needs**

- High-accuracy data extraction module.
- Strong document preprocessing capabilities.
- Adaptive machine learning feedback module.
- Smooth integration with enterprise systems.
- Ensuring data security and compliance.

### **Our solutions**



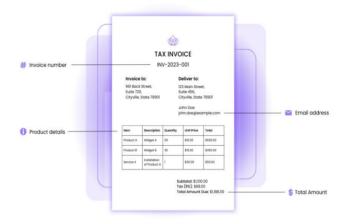
Developing a system to accurately extract data from documents.



Optimizing performance through AI training.

### **Benefits & Values**

- ✓ Automated data extraction ensures precision, reduces manual entry errors.
- ✓ Reduce labor costs, increase productivity, and achieve significant savings.
- ✓ Rapidly process large data volumes with high accuracy.
- Enhances workflow automation and efficiency.



### **Technical stack**

### \_

Teamsize

Resources

Start date

BERT

Python

sPacv

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2022

Transformer

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### **Key features**

- # Automated data extraction and processing.
- # Efficient data extraction capabilities.
- # Seamless integration with existing systems.

### Scope of work



Coding



Testing



Maintenance



### **VIRTUAL TRY ON**

A pioneering e-commerce platform specializing in virtual product trials is revolutionizing the retail experience. We've developed an advanced predictive analytics system powered by automated machine learning, ensuring precise assessments of product fit and appearance.





### **Business needs**

- ◆Advanced virtual fitting technology for accurate visualization of products for customers.
- Reduces return rates and in-store visits significantly.
- ◆ Easy integration into current e-commerce platforms to enhance the shopping experience.
- ◆ Scalable infrastructure to support high-resolution virtual simulations.
- ◆ AI-driven recommendations for personalized virtual try-on experiences.
- Realistic rendering capabilities to simulate various lighting and environmental conditions.

### **Our solution**



A solution enabling users to virtually try on products for a personalized and interactive fitting experience.



Integrating AI feature to value your shopping.

### **Benefits & Values**

- Enhances customer engagement and experience.
- Reduces return rates and in-store visits significantly.
- ◆ Increases customer confidence and satisfaction.
- Saves time and boosts conversion rates.
- Offers a modern, innovative shopping solution.

# Demo:



### Scope of work

### Full-stack development



**UI/UX DESIGN**Designers



Front & Back-end Developers



**TESTING**Testers



Developers, Testers

### **Key features**

- #Realistic 3D modeling and visualization.
- #Accurate size and fit recommendations.
- #Easy integration with online and in-store platforms.
- #Real-time feedback and adjustments.
- #Data analytics and customer insights.

### **Technical stack & Resources**

- GAN
- TesorFlow
- OpenCV
- PyTorch
- DensePose
- Python
- Human Parsing

Teamsize

10

Start date

2024

**NEXT** | Next Solution Lab

### REAL-TIME COMMUNICATION IN TELEPRESENCE ROBOT

With increasing demand for remote interaction, our telepresence robot is designed for live video communication. It offers remote operation via a web interface, keyboard, gamepad, or custom controller gloves while incorporating advanced sensor capabilities for comprehensive environmental awareness.

#MachineLearning #Startup #IoT #Logistics #AI #ROBOTICS

### **Business needs**

- Real-time video communication.
- Versatile control mechanisms.
- Seamless integration with enterprise systems.
- Comprehensive environmental awareness.

### **Our solutions**

Developed a telepresence robot to meet the growing demand for remote interaction and operation.

### **Benefits & Values**

- Interactive bidirectional audio-visual communication and robotic arms.
- Enhanced safety with advanced obstacle detection capabilities.
- Versatile control options for diverse user preferences.
- Scalable design for diverse environments and expanded scenarios.

### **Key features**

- # Low-latency real-time video communication.
- # Secure role-based access control system.
- # Multiple control interfaces.
- # Advanced obstacle detection with ultrasonic sensors.
- # Remote management and control from any location.

### **Technical stack**

WebRTC

Jetson Nano

MQTT

• ESP-32

ESP-NOW

Arduino

• I2C

Python

UART

Django

### Resources

**Teamsize** 

Start date

6

2023

### Scope of work



Coding Front & Back-end Developers



**Testing** Testers



**Maintenance**Developers,
Testers



### METER DETECTION AND RECOGNITION

Leveraging advanced image processing and machine learning technologies, this project aims to provide a modern and efficient solution for automating meter reading processes to overcome the errors of thetraditional manual reading process.



#DeepLearning

#OCR



### Scope of work



CODING Front & Back-end Developers



**TESTING**Testers



MAINTENANCE Developers, Testers

# **Resources** 6 talents

**Duration**Start Date: 2023

**Technical stack**Python, YOLO, CTC,
TensorFlow, PyTorch

### **Key features**

- # Automated data collection.
- # Real-time monitoring with IoT.
- # Advanced image processing.
- # Seamless system integration.

### **Business needs**

- Accurate meter readings are needed to ensure precise billing and resource management.
- Efficient data collection is needed to reduce operational
- costs and labor intensity.
  - Real-time monitoring for proactive maintenance and informed decision-making.
- Scalable solutions are adaptable to various meter types and utility networks.

### **Our solutions**



Integrates advanced image processing, machine learning, automated data collection, and IoT integration for efficient meter detection and management.

### **Benefits & Values**

- Minimizes billing errors, boosts efficiency.
- Automates data collection, cuts costs.
- Enables proactive maintenance, swift decisions.
- ✓ Lowers manual reading costs, enhances efficiency.
- Adapts to diverse meters, scales utility.

### LLM BASED CONTRACT PAPER DRAFTING

LLM-based contract paper drafting revolutionizes legal document creation by leveraging advanced artificial intelligence. This innovative approach enhances efficiency, accuracy, and accessibility in drafting comprehensive and tailored contracts, catering to diverse legal needs swiftly and reliably.

#MachineLearning

#Project-based

#LLM

#AI

### **Business needs**

- Efficient contract drafting process to save time and resources for legal professionals.
- Ensure precise and standardized language in legal documents to minimize errors and discrepancies.
- Simplify contract creation for non-legal professionals and small businesses without dedicated legal teams.

### **Our solutions**



Developing a contract paper drafting platform to improve legal understanding through continuous document training and adaptive accuracy enhancements.

### **Benefits & Values**

- Accelerates contract creation and revision processes.
- Ensures legal accuracy and compliance.
- Reduces operational costs and resource allocation.
- Enhances accessibility for non-legal professionals.
- · Improves document security and confidentiality.

### Resources

5 talents

### **Duration**

Start date: 2024

**Technical stack** Python, OpevCV, PyTorch, TensorFlow

### **Key features**

#Automated contract drafting and

customization.

#Advanced legal language processing.

#Collaboration tools for legal professionals.

#Multi-language support.

#Easy integration with existing document management systems.

### Scope of work



:-



Coding

Front & Back-end Developers **Testing** Testers Maintenance Developers, Testers



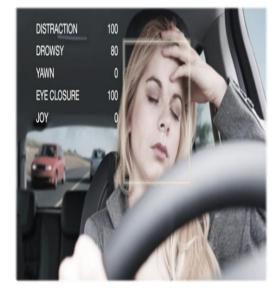
### SAFE DRIVING USING FACIAL KEY-POINTS DETECTION

A cutting-edge approach to enhancing road safety through real-time analysis of driver's facial key-points By leveraging advanced computer vision technology, this system monitors driver's attention levels, fatigue, and distraction cues, offering timely alerts and interventions to ensure safer driving experiences.

#DeepLearning

#Project-based

#AT



Resources 6 talents

**Duration**Start date: 2022

**Technical stack** Python, OpenCV, Pandas, TensorFlow, PyTorch

### **Business needs**

- Advanced facial recognition technology.
- Real-time monitoring and alert system.
- Data analytics and reporting capabilities.

### **Our solutions**



An advanced system that monitors driver behavior in real-time using facial recognition, providing timely alerts to enhance road safety.



Improving performance through AI training.

### **Benefits & Values**

- ✓ Enhances driver safety by monitoring attention and fatigue in real-time.
- Reduces the risk of accidents through timely alerts and interventions.
- ✓ Lowers insurance costs by demonstrating proactive safety measures.
- Provides valuable data insights for optimizing driver training and support.
- ✓ Meets regulatory compliance for road safety and driver monitoring.

### **Key features**

- # Real-time facial recognition and monitoring.
- # Accurate detection of driver attention.
- # Customizable alert settings and thresholds.
- # Comprehensive data analytics and reporting.

### **Scope of work**



Coding



Testing



Maintenance



# Thank you!

Feel free to reach out to us if you have any queries.

Call Us

(+880) 1765799777

**Email Us** 

query@nextsolutionlab.com

**Visit Our Website** 

www.nextsolutionlab.com