TEK enable

Traditional AI

Revolutionise your business using artificial intelligence services.

TEKenable's team of data scientists and technologists help organisations revolutionise their business by delivering enhanced throughput, speedier time to market and more personalised offerings.



Conversational Interfaces

Are you looking to increase sales, cut costs, and vastly improve customer experience? Bots have become the most effective new tool to augment your business. We understand your business and customer needs, and deliver tailor-made chatbot integration, fully integrated into your existing systems to provide maximum impact.

Serve your customers by answering questions, automating processes, and advising.

Our AI chatbots constantly learn from previous conversations and improve their capabilities. Using AI language recognition, Chatbots provide an immediate customer service presence that offers concise answers to some of the most frequently asked questions and which, with chatbot integration into your systems, can perform transactions on behalf of the customer.



Assist your customers.

Includes identifying where specific products, departments, and brands are located, what services and facilities can be found in a particular store etc.



Speedily solve inquiries.

Solve simple, quick response enquiries that transition more complex queries to Customer Service Agents.



Automate CRM worklow.

In the US, the savings from automating the customer service positions through Chatbots is an estimated \$23 billion dollars per year.

We use the Microsoft Cortana Intelligence platform language understanding, translation and object classification services to identify what is being requested and data associated with the request. We do this with an approach that we call "Conversational NLP" allowing a more natural conversation flow and avoiding the stilted, scripted flow forced by interactive voice response, for example.



1 ΡΙΔΝ

We determine the capabilities that the Bot will have, the systems that it needs to interact with and how that will happen and pre-train the Bot with the language and transaction understanding that it will need.



2. BUILD

We use Power
Virtual Agent and
software based bots which
are built using C#.NET,
Microsoft Bot Framework,
Azure cloud platform,
Cortana Intelligence
and Language
Understanding.



3. TEST

We encompass a software and cognition test in which we ask that you pretend to be customers and using actual call centre conversations, to test the Bots understanding.



4. PUBLISH

We make the Bot operational in the



5. CONNECT

We make the Bot visible through the channels it will use to communicate. Apart from the web browser interface these include: Slack, Skype, Messenger, Teams, etc.

Serve your customers by answering questions, automating processes, and advising. Get in touch with TEKenable today, to start your journey.

Forms Recognition

Azure Form Recognizer empowers companies to automate document processing, especially paper forms, extract valuable information, and optimise their workflows, leading to increased productivity, accuracy, and cost savings.

TEKenable harnesses the power of Microsoft Azure Form Recognizer, a cutting-edge cloud-based artificial intelligence (AI) service, to help clients effortlessly unlock valuable insights and essential data from both structured and unstructured forms and documents. This remarkable solution empowers organisations to optimise their document processing and data extraction operations, significantly minimising manual labour and enhancing overall efficiency. By leveraging the capabilities, TEKenable ensures seamless and streamlined experiences for its clients, revolutionising the way they handle information and achieving unprecedented levels of productivity.

Overall, Azure Form Recognizer empowers companies to automate document processing, extract valuable information, and optimise their workflows, leading to increased productivity, accuracy, and cost savings.

FORM EXTRACTION

Analyse various types of documents, such as invoices, receipts, purchase orders, surveys, and contracts. Identify and extract key fields like dates, addresses, names, product details, and amounts, regardless of the document's layout or format.

CUSTOM MODELS

Train custom models to recognise specific document types unique to your business. This allows you to tailor the extraction process according to your specific requirements, achieving higher accuracy and reliability.

INTEGRATION AND AUTOMATION

Integrates seamlessly with other Azure services and tools, allowing you to automate document processing workflows. It offers APIs and SDKs for easy integration into existing applications, making it straightforward to incorporate document analysis capabilities into your business processes.

CONFIDENCE SCORES AND VALIDATION

The service assigns confidence scores to extracted data, indicating the level of certainty for each field value it reads. You can set confidence thresholds to validate and verify extracted data, ensuring its accuracy and reducing the need for manual review.

Key Features and Capabilities of Azure Form Recognizer

LAYOUT UNDERSTANDING The service provides insights

The service provides insights into the structure and layout of documents. It can identify tables, headers, footers, and other sections within a document, making it easier to understand the document's organisation and hierarchy and extract specific data from it.

HANDWRITING RECOGNITION

Handwritten entries on forms can be read and intelligently understand things like hand ticked boxes, even when that tick strays into neighbouring boxes.

OPTICAL CHARACTER RECOGNITION (OCR)

Leverage OCR technology to convert scanned or photographed documents into machine-readable text. This enables the extraction of information from images and PDF files.

Azure Form Recognizer can help companies in many ways:

STREAMLINED DATA EXTRACTION: It reduces manual data entry efforts by automating the extraction of relevant information from various documents. This saves time, minimises errors, and improves data accuracy.

IMPROVED EFFICIENCY: By automating document processing tasks, Azure Form Recognizer enables companies to handle large volumes of documents quickly and efficiently. This can lead to faster decision-making and improved operational efficiency.

ENHANCED COMPLIANCE: Companies dealing with regulatory requirements can use Azure Form Recognizer to extract and validate specific data points from documents, ensuring compliance with industry standards and regulations.

EMBEDDED SECURITY: Count on robust security and privacy measures at an enterprise level, ensuring the protection of your data and any trained models.

COST SAVINGS: By reducing manual labour and accelerating document processing, Azure Form Recognizer can help companies save costs associated with document handling, data entry, and data verification.

INSIGHTS AND ANALYTICS: Extracted data can be further analysed to gain valuable insights and support decision-making. Azure Form Recognizer's structured output allows for easier data integration with other tools and systems.

Azure Cognitive Search

Azure Cognitive Search is a powerful tool developed by Microsoft that helps companies make sense of vast amounts of data. Imagine having a huge pile of documents, like reports, articles, or customer reviews, and needing to find specific information within them quickly. That's where Azure Cognitive Search comes in.

This service uses advanced algorithms and artificial intelligence to analyse and understand the content of your documents. It extracts key information, such as keywords, entities (like names of people or organisations), and even sentiment (whether the text is positive or negative). It then organises this information in a way that makes it easy to search and retrieve.

Let's say you're a retail company, and you want to find all the customer reviews that mention a particular product. Azure Cognitive Search can help you by indexing all your customer reviews, analysing their content, and creating a searchable index. You can then use a simple search interface to find reviews containing specific keywords or phrases related to the product you're interested in. It saves you the time and effort of manually going through each review one by one.



ENHANCED SEARCH RESULTS

But Azure Cognitive Search doesn't stop there. It also provides powerful features to enhance search results. For example, it can suggest related terms or automatically correct spelling mistakes to ensure you find the most relevant information. It can also rank search results based on relevance, so you see important and useful results first.



SCALABILITY

Another great aspect of Azure Cognitive Search is its scalability. It can handle large volumes of data, allowing companies to process and search through massive collections of documents. So, whether you have thousands or millions of documents, Azure Cognitive Search can handle it.



DATA INSIGHTS

By using Azure Cognitive Search, companies can unlock valuable insights hidden within their data, improving decision-making, customer satisfaction, and operational efficiency. It helps businesses find the right information at the right time, making them more productive and competitive in today's fast-paced world.

As a Microsoft partner, TEKenable can help your company implement and utilise Azure Cognitive Search effectively, tailoring it to your specific needs.

Speech

A managed service offering of industry-leading speech capabilities such as speech-to-text, text-to-speech, speech translation, and speaker recognition.

Build voice-enabled apps confidently and quickly with the Speech SDK. Transcribe speech to text with high accuracy, produce natural-sounding text-to-speech voices, translate spoken audio, and use speaker recognition during conversations. Explore with a no-code experience and create custom models tailored to your app with Speech studio.

SPEECH TO TEXT



A speech service feature that accurately transcribes spoken audio to text. Accurately and efficiently transcribe audio to text in multiple languages and variants. Customise models to enhance accuracy for domain-specific terminology. Get more value from spoken audio by enabling search or analytics on transcribed text or facilitating action—all in your preferred programming language.

High-quality transcription: Get accurate audio to text transcriptions with state-of-the-art speech recognition.

Customisable models: Add specific words to your base vocabulary or build your own speech-to-text models.

Flexible deployment: Run Speech to Text anywhere—in the cloud or at the edge in containers.

Production-ready: Access the same robust technology that powers speech recognition across Microsoft products.

SPEECH TRANSLATION



Easily integrate real-time speech translation to your app. Translate audio from more than 30 languages and customise your translations for your organisation's specific terms—all in your preferred programming language.

Production-ready: Benefit from fast, reliable speech translation powered by neural machine translation technology.

Customisable translations: Tailor models to recognise domain-specific terminology and unique speaking styles.

Normalised text: Deliver readable translations with an engine trained to normalise speech output.

Built-in security: Your data stays yours—your speech input is not logged during processing.

Add high-quality translations to your apps: Generate speech-to-speech and speech-to-text translations with a single API call. Speech Translation captures the context of full sentences to provide accurate, fluent translations and improve communication between speakers of different languages.

Tailor translations to reflect domain-specific terminology: Customise speech recognition and translation for terminology specific to your business or industry. Train and deploy a custom translation system—without requiring machine learning expertise.

Normalise text for better translations: Speech Translation can remove verbal fillers ("um," "uh," and coughs) and repeated words, add proper punctuation and capitalisation, and exclude profanities for more readable translations.

TEXT TO SPEECH



A speech service feature that converts text to lifelike speech. Build apps and services that speak naturally. Differentiate your brand with a customised, realistic voice generator, and access voices with different speaking styles and emotional tones to fit your use case—from text readers and talkers to customer support chatbots.

Lifelike synthesised speech: Enable fluid, natural-sounding text to speech that matches the intonation and emotion of human voices. Customisable text-talker voices: Create a unique Al voice generator that reflects your brand's identity.

Fine-grained text-to-talk audio controls: Tune voice output for your scenarios by easily adjusting rate, pitch, pronunciation, pauses, and more.

Flexible deployment: Run Text to Speech anywhere—in the cloud, onpremises, or at the edge in containers.

Tailor your speech output: Fine-tune synthesised speech audio to fit your scenario. Define lexicons and control speech parameters such as pronunciation, pitch, rate, pauses, and intonation with Speech Synthesis Markup Language (SSML) or with the audio content creation tool.

Deploy Text to Speech anywhere, from the cloud to the edge: Run Text to Speech wherever your data resides. Build lifelike speech synthesis into applications optimised for both robust cloud capabilities and edge locality using containers.

Build a custom voice for your brand: Differentiate your brand with a unique custom voice. Develop a highly realistic voice for more natural conversational interfaces using the Custom Neural Voice capability, starting with 30 minutes of audio.

SPEAKER RECOGNITION



A speech service feature that verifies and identifies speakers. Accurately verify and identify speakers by their unique voice characteristics.

Speaker verification: Use voice to verify speakers.

Speaker identification: Identify individual speakers within a group. Built-in security: Secure your speech data with enterprise-grade security and compliance.

Enable frictionless, secure customer experiences: Improve the customer experience by streamlining verification processes.

Use voice to verify individuals for secure, frictionless customer engagements in a wide range of solutions, from web applications to call centers. Speaker verification can use either passphrases or freeform voice input.

Unlock value from scenarios with multiple speakers: Determine a speaker's identity from within a group of enrolled speakers. Speaker identification enables you to attribute speech to individual speakers, support multiuser voice recognition for personalised interactions, and

Language

Empower your services with Al's natural language capabilities, including entity recognition, sentiment analysis, automated question answering and conversational language understanding. Unleash the power of these capabilities to develop applications that emulate and respond to human conversation with authenticity.



ENTITY RECOGNITION

Language AI will allow you to recognise key terms and phrases, understand sentiments, and build conversational interfaces directly into applications. Allowing you to confidently evaluate, create and deploy customisable models.

State-of-the-art Capabilities: Empowered by state-of-the-art AI research, unlock the ability to build highly effective applications that deliver significant value to your business model.

Visual Interface: Maximise efficiency in annotating, training, evaluating, and deploying your models with an engaging visual interface.

Multilingual Models: Leverage the capability to train the system in your native language and seamlessly repurpose the model for multiple languages, simplifying deployment across global markets.

Privacy: The text input exclusively serves model training purposes, ensuring data privacy and security at all times.



SENTIMENT ANALYSIS

In business, sentiment analysis enables organisations to gain a comprehensive understanding of customer's thoughts of their products, services, and brand. This is done through the use of identifying key terms and phrases, understanding sentiments, and building conversational interfaces into applications.

Leading-edge Technology: Harness the potential of cutting-edge Al research to monitor audience emotions and attain deeper insights into their cognitive processes.

Captivating Visual Interface: Streamlined interface for effortless annotation, training, evaluation, and deployment of your models.

Models Capable of Handling Multiple Languages: Harnessing intelligent technology for effortless system expansion: seamlessly transform your initial design into a multilingual solution.

Data Privacy: Your text input exclusively utilised for model training, ensuring privacy and security.



QUESTION ANSWERING

Infuse a sense of familiarity into your existing data through question answering, leveraging the wealth of knowledge stored in your business FAQs, manuals, and documents. By doing so, your knowledge base evolves intelligently, constantly learning from user behaviour to enhance its effectiveness.

Automatic Question-answer Extraction: Leverage existing content from your business FAQs, product manuals, guidelines, support documents, and policies to generate informative responses to user questions.

Knowledge Base with Suggestions: Build an extensive knowledge base of answers that provides alternative questions, empowering you to add or exclude them based on relevance to the subject or presented query.

Complex Multiturn Conversations: Utilising this technology, the creation, editing, and training of complex multiturn conversations in the new language studio or REST APIs become effortless and seamless.

Bots can be created and published without code experience: Effortlessly generate bots without any coding experience by simply uploading a semi-structured document or URL.



CONVERSATIONAL LANGUAGE UNDERSTANDING

Develop applications that possess customer understanding and interpretation capabilities by extracting vital information from conversational phrases. Utilise domain-specific keywords and phrases (supporting over 96 languages) to create extraction models and intent classifications.

Language Studio: Leverage the language studio functionality to streamline the creation, labelling, and deployment processes for your custom models. No Machine-learning: With Conversational Language Understanding, machine learning becomes unnecessary as the system handles complex language interpretation and understanding for you.

Configurable: CLU is highly configurable, empowering you to optimise and customise multiple language applications for the best possible responses. Enterprise-grade Security: We prioritise data privacy and confidentiality, ensuring that your data and trained models remain secure and private at all times.



TRANSLATOR

contextually appropriate translations.

Al Translator enhances global connectivity, fosters cultural exchange, and enables effective communication, bringing people from different linguistic backgrounds closer together. Translating text instantly over more than 100 languages, it can be used in a range of cases, such as call centres, multilingual conversational agents, or in-app communication.

Broad Language Coverage: With translator's state-of-the-art technology, achieve accurate translation of text into over 100 languages.

Customisable Translations: Construct translation models capable of effectively handling business-specific terminology, ensuring accurate and

Production-ready: Leverage the technology behind billions of daily translations in various Microsoft products, empowering your applications with the same cutting-edge capabilities.

Built-in Security: Rest assured your data remains confidential—your text input is not logged during the translation process.

Decision

ANOMALY DETECTOR

Anticipate issues prior to their emergence using an Azure Al service designed for anomaly detection. Effortlessly integrate time-series anomaly detection functionalities into your apps, enabling users to swiftly detect and address issues. Anomaly Detector seamlessly processes various types of time-series data and automatically selects the most suitable anomaly detection algorithm for your specific data, guaranteeing exceptional accuracy. Tailor the service to identify anomalies of any magnitude. Deploy the anomaly detection service seamlessly, whether in the cloud or at the intelligent edge.

Utilising a robust inference engine, your timeseries dataset is meticulously evaluated, and the optimal anomaly detection algorithm is automatically chosen to enhance accuracy based on your specific scenario.

Enabling automatic detection, eliminates the need for labelled training data, allowing you

CONTENT MODERATOR

Leverage AI technology to conduct safety monitoring of textual and visual content. Azure Al Content Safety is a content moderation platform that uses Al to keep your content safe. Leverage advanced AI models to swiftly and effectively identify offensive or unsuitable content in text and images, enhancing online experiences for all individuals.

Utilise language models capable of analysing multilingual text, regardless of its length, while comprehending context and meaning

Run cutting-edge Florence technology to deploy vision models that excel in image recognition and object detection tasks. Leverage AI content classifiers with exceptional detail to identify and categorise explicit, violent, hateful, and self-harming content.

Utilise content moderation severity scores to assess the degree of risk associated with content, indicating its level of potential harm on a scale ranging from low to high.

PERSONALISER

Provide tailored and pertinent experiences for every individual user Enhance conversion rates and user engagement while incorporating real-time relevance into product recommendations using Azure's exclusive reinforcement learningbased capabilities. Use Personaliser, part of Azure Cognitive Services, as a standalone personalisation solution or to complement existing ranking engineswith no machine learning expertise required.

Enhance suggestions, optimise next best actions, and elevate content offers. Employ the apprentice mode to verify if Personaliser can achieve comparable outcomes to your current solution. Effortlessly monitor and fine-tune the

learning loop based on your specific parameters and KPIs using the user-friendly interface.

No machine learning expertise required



Vision

AZURE COGNITIVE SERVICE FOR VISION

Uncover valuable computer vision insights by utilising OCR (Optical Character Recognition) and Al-driven image and video analysis.



Azure Cognitive Service for Vision provides a comprehensive solution that enables your applications to utilise advanced computer vision capabilities. Enhance your apps with the ability to analyse images, extract text through OCR, detect faces responsibly, and leverage prebuilt image tagging. Seamlessly integrate vision features into your projects without the need for prior machine learning expertise.

Utilise image analysis capabilities that encompass over 10,000 concepts and objects, enabling the detection, classification, captioning, and generation of insights from images. Leverage spatial analysis to gain real-time insights into the presence and movements of individuals within physical areas. Utilise OCR to extract both printed and handwritten text from images, accommodating diverse languages and writing styles. Leverage facial recognition technology to develop intelligent applications capable of recognising and verifying human identity.

CUSTOM VISION

Effortlessly personalise state-of-the-art computer vision models to cater to your specific use case.



With Custom Vision, a component of Azure Cognitive Services, effortlessly tailor and integrate cutting-edge computer vision image analysis into specialised domains. Enhance customer experiences, streamline manufacturing processes, expedite digital marketing campaigns, and achieve much more without the need for machine learning expertise.

Customise your scenario to tailor your model and perceive a specific object precisely for your unique use case.

The intuitive model creator and user-friendly interface enables effortless creation of your own image identifier model, making the process intuitive and straightforward.

Flexible deployment allows you the benefit to run Custom Vision in the cloud or on the edge in containers.

Leverage built-in security measures that ensure enterprise-grade protection and privacy for your data and trained models.

Machine Learning

Gain insights from raw data with machine learning technology. Machine Learning is a "general purpose technology," like the steam engine and electricity, which spawns a plethora of additional innovations and capabilities. We have been ahead of the curve in mastering this new technology and providing a clear differentiator for businesses.

SOLVE COMPLEX PROBLEMS

Neural networks, Deep Learning networks, Decision Trees, Cluster Analysis and Bayesian Analysis are just some of the techniques available to find order in apparently chaotic data.

ANALYSE HIDDEN PATTERNS

Machine Learning is helping businesses manage incredible volumes of data and derive insights. The sensors and chips embedded in physical things around us (IoT) present a huge opportunity to tap valuable data from customers, run analytics to help you make better and more informed decisions.

PREDICT BEHAVIOURS

Machine Learning offers you speed, scale, and predictive accuracy - thereby, making businesses agile in their responses to a rapidly changing environment, and with it increasing the velocity of ideas and innovations that your business can generate and execute.

SUPPORT DECISION MAKERS

Supervised and unsupervised learning techniques enable the creation of ML models that provide predictive outcomes which can be applied to customer retention, real time marketing and recommendation applications driving better customer service and supporting decision making.

REAL TIME INSIGHTS IN THE CRM

Using Machine Learning, we can help you to provide real-time insights to your sales team, analysing engagement patterns to identify pipeline sales at risk and to provide recommendations around customers, sales and prospects to optimise business outcomes.



We can provide guidance, support, and expertise to ensure you get the most out of this powerful tool, helping you turn your data into a valuable asset. Get in touch.



www.tekenable.com