





Systematically infusing new and existing applications with AI capabilities, making them smarter, autonomous, valuable, with a positive impact on society and the environment

Al sometimes seems to be the domain of mad data scientists and highly specialized, secretly initiated experts. But actually through simple APIs and webservices every application can benefit from touches of smart, without any black magic involved. AI disrupts every industry with intelligent platforms and solutions. Surf the applications portfolio wave to find the application moments that would profit the most from added AI capabilities such as image recognition, natural language understanding, automated decisions, predictive analytics and recommendations. Use benefits logic to prioritize the cases and leverage a catalog of ready-toimplement AI services. Application users will love all that extra intelligence.



in
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## WHAT

- Many AI and cognitive capabilities can be easily accessed through web services and APIs, including image and voice recognition, intelligent automation, natural language processing, conversational systems (bots), plus predictive and prescriptive analytics.
- Often, these capabilities come with pre-trained models, eradicating the need to acquire training data and build algorithmic models.
- Applications become 'smarter' and 'ultra-speedy', creating more value for users with enhanced performance and speed.
- To effectively incorporate AI, new and existing applications portfolios need to be systematically reviewed to find added value opportunities, while considering benefits.
- Metrics-based portfolio management tools such as <u>eAPM</u> can enable creating this 'Apps ♥ AI' shortlist.

## **USE**

- Capgemini's own solution, <u>Project FARM</u>, an intelligent data platform to resolve global food shortages. Global demand for food is anticipated to increase by 60% by 2050
- Microsoft's <u>Anomaly Detector</u> embeds anomaly detection into apps, to quickly identify potential problems, select the best-fitting detection model and ensure accuracy.
- IBM Watson <u>Tone Analyzer</u> can be added to customer service applications, responding to customers appropriately and at scale, detecting if they are satisfied or frustrated.
- Google's <u>Cloud Vision Product Search</u> can be added to any commercial website, allowing users to upload an image of what they want, for it to match products in their catalog.
- Tesco and Monoprix are leveraging conversational commerce systems such as Alexa and Google Home together with machine learning capabilities. (Capgemini Research Institute)
- <u>Capgemini's Intelligent Automation Platform</u> (CIAP), enabling effective IT, applications services, and business operations delivery to provide intelligent automation at its full potential for businesses to reap maximum value across the entire operation.

## **IMPACT**

- Extend the life span of existing applications by adding 'smart' functionality.
- Increase adaptability of applications, and automate manual activities that originally required cognitive, 'human' capabilities.
- Equip developers with a toolset to build powerful cognitive capabilities, without the need for a deep background in data science and analytics.
- Create a more compelling, personalized user experience in both business and consumer-oriented applications and mobile apps.

## **TECH**

Toolkits and platforms: <u>Capgemini PerformAl</u>, <u>Microsoft Cognitive Services</u>, <u>IBM Watson APIs</u>, <u>AWS AI Services</u>, <u>Pega Real-Time AI</u>, <u>Rainbird</u>, <u>Google Cloud AI Building Blocks</u>, <u>TensorFlow</u>, <u>PyTorch</u>, <u>RapidMiner</u>, <u>Keras</u>

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