

How AI Helps Small Businesses

5 use cases

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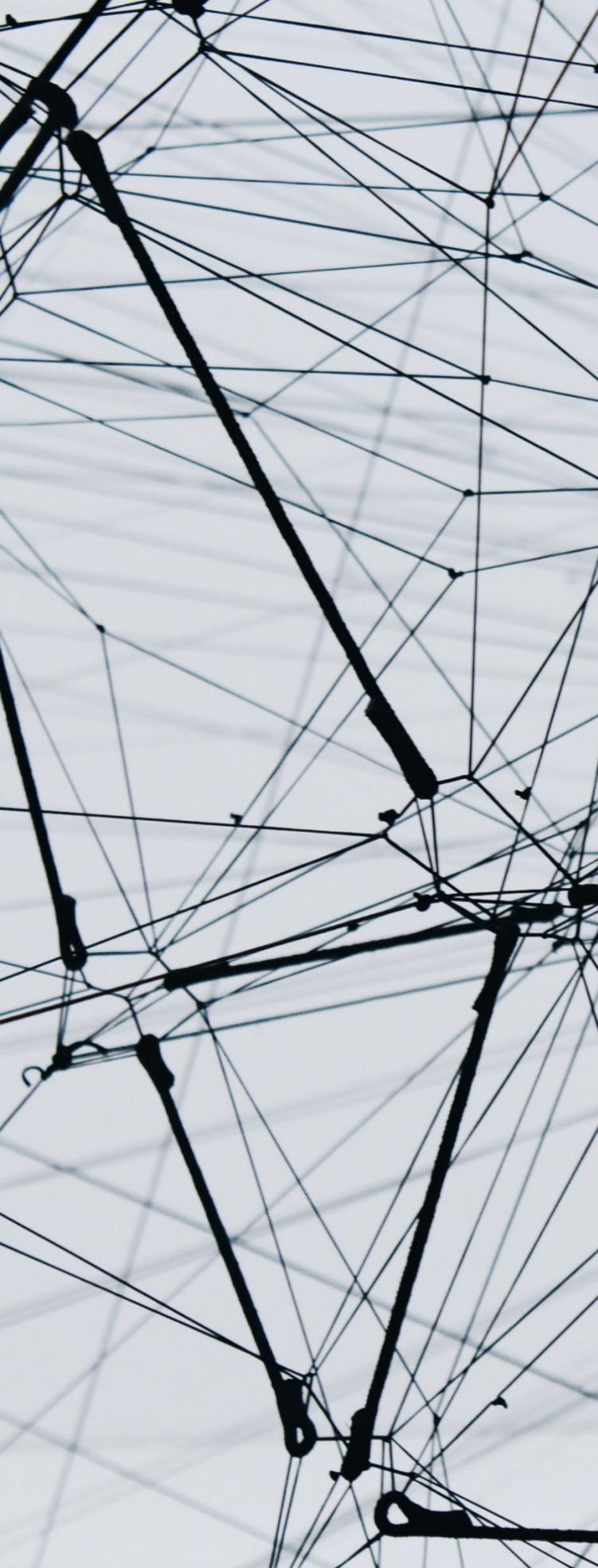
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What is Artificial Intelligence (AI)?

When people hear AI, they often think about robots and talking computers. AI today is much more mundane and simple—but therefore not less powerful. In essence, Artificial intelligence leverages computers and machines to mimic the **problem-solving** and **decision-making capabilities** of the human mind.

We are now at the brink of the fourth Industrial Revolution. AI is one of the biggest facets of this revolution, and it will affect almost all sectors, as did previous Industrial Revolutions. AI's abilities have increased significantly since its inception in 1955; it can now detect patterns more accurately, continuously and based on more data. Currently, AI has surpassed human intelligence in some specific domains. These domains can be split in three categories:

- **General** tasks could include visual recognition, speech recognition, natural language processing and translation.
- **Formal** tasks are related to games where some theorem and learning is involved.
- **Expert** tasks are those that would otherwise be executed by a domain expert. Think of tasks such as diagnosing disease and engineering.

The potential for SMBs is greatest within the General category.

The Impact of AI for Small Businesses



Artificial Intelligence, now widely available for SMBs, improves decision making and opens up new opportunities for adding value.

Artificial Intelligence (AI) offer an advantage to businesses, especially small and medium-sized businesses (SMBs) looking to **compete with much bigger corporations**. In fact, such technologies are becoming essential to our own approach to innovation and **better ways of working**. Innovative SMBs should be continually looking for new ways to use digitalization and AI to **make work easier, faster and less repetitive**. These technologies, now widely available for SMBs, enable better sharing of workplace knowledge and expertise. They also improve decision making and open up new opportunities for adding value and creativity that can help

level the playing field for SMBs in today's competitive global business environment. Automation offers a world of possibilities and, like AI, is becoming widely available outside the enterprise space. Automated solutions can free small and medium-sized businesses from the inefficiencies – such as time-consuming manual processes, human error and needless paperwork – that have long plagued numerous business processes. Our commitment to such intelligent automation and efficiency improvements has given us a **unique perspective** on how AI can help SMBs. On the next pages we'll highlight five cases that illustrate the potential of AI.



Case 1: Image Classification

Categorise and process unlimited images in a snap.

We humans are very good at saying what we see in an image. However, when given thousands of images, accuracy and discipline drops as the task seems endless. Image classification models take the **processing** and **categorisation** of what's visible in an image to the **next level**. AI today can be trained to **analyse complex and technical images** and not only your dog or cat. Automating this classification can save tremendous resources and time.

Some industries transformed by image classification:

- Casting and modelling agencies
- Crime investigation
- Media production
- Repair & service teams

Triggered? Some resources and libraries to get you started:

1

Vision AI by Google
<https://cloud.google.com/vision>

2

Core ML
www.developer.apple.com

3

Trendskout
<https://trendskout.com>



Case 2: Optical Character Recognition (OCR)

Capture data from structured & unstructured documents without configuring rules or templates.

OCR allows to capture data from structured & unstructured documents without configuring rules or templates. Because every company deserves an automated data extraction process. Using OCR technology allow organisations to **extract precise info from unstructured or quick changing documents** like incoming invoices from scans, PDFs, etc...

Which companies could benefit from this technology? Well, every company that receives or sends invoices, handles any kind of document in an organised way or simply wants focus on their core business instead of handling paperwork.

Triggered? Some resources and libraries to get you started:

1

Rossum.ai
<https://rossum.ai>

2

Google AI
<https://www.google.ai>

3

Contract.fit
<https://contract.fit>

Case 3: Tone & Sentiment Analysis



With customers expressing their thoughts constantly, sentiment analysis is becoming an essential tool.

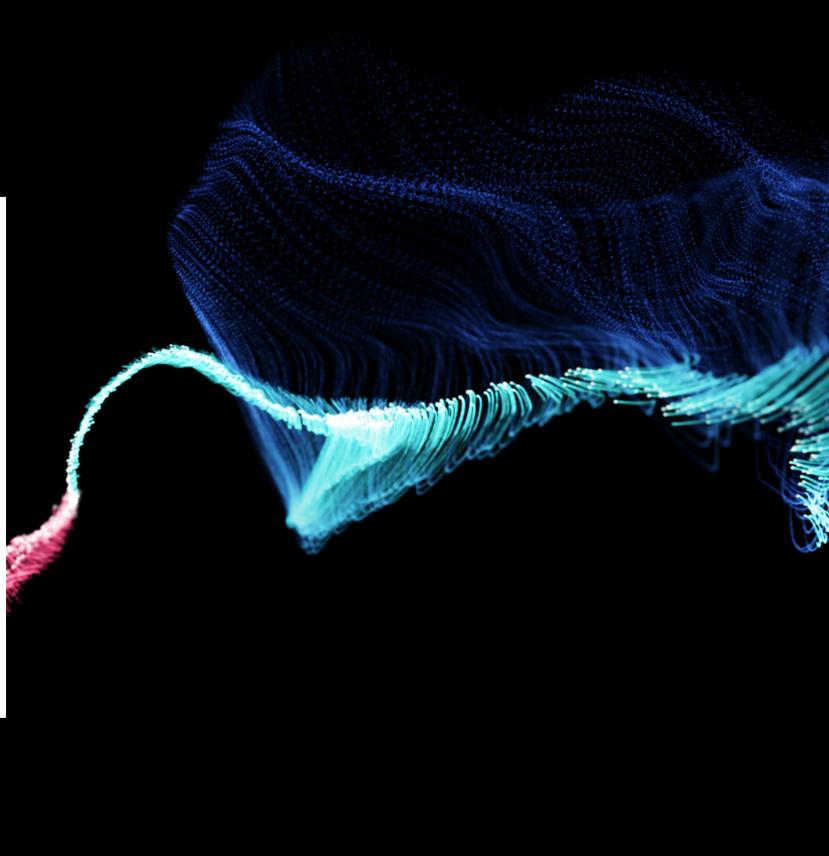
Sentiment analysis is the process of **detecting the tone** (positive or negative) and sentiment in text. Business can use this technology to detect sentiment in social data, measure brand reputation and understand their customers and the feedback they provide.

A customer expresses his/her thoughts and feelings more openly than ever before. As a result, sentiment analysis is becoming an essential tool to **monitor and understand** it. Automatically analyzing feedback, opinions in survey responses and social media conversations, allows companies to learn what makes customers happy or frustrated, so that they can tailor products and services to meet their customers' needs and **prioritise urgent requests**.

Resources and libraries to get started:

- 1** IBM Watson Tone Analyzer
www.ibm.com
- 2** QeMotion
<https://www.qemotion.com/en/>
- 3** Google AI
<https://www.google.ai>

Case 4: Transcribing Audio to Text



Speech-to-text technology uncovers the content of a recorded text or conversation.

Uncover the content of a recorded text or conversation by using speech-to-text technology for various purposes:

Increasing accessibility: Make your content more accessible to your audience with easy-to-read transcripts.

Analysing Conversations: Optimise and monitor conversations all while keeping track of who said what (speaker diarization) in a dialogue.

Cataloging Archives: Transcribe audio and video archives to make them searchable and editable. This helps to quickly locate specific words and phrases within time-stamped transcripts.

Resources and libraries to get started:

1

rev.ai
<https://www.rev.ai>

2

Amberscript
<https://www.amberscript.com/>

3

Scriptix.io
<https://www.scriptix.io>



Case 5: Automate object counting

Detect, identify and count what matters to your business, in the complexity of real-world situations.

Increase your recognition capabilities by using Object Counting models.

Automate image and video analysis with easy-to-use machine learning solutions to **identify and count items**, people, animals, objects -- you name it.

Some use cases that automate counting:

- Warehousing
- Stock management
- Transport
- Surveillance
- Event Management
- Access Control

Resources and libraries to get started:

1

Trendskout

<https://trendskout.com>

2

Element AI

<https://www.elementai.com>

3

Counting Things

<https://countingthings.com>

Nesting AI within your workflows and ecosystem.



AI can be integrated and combined with your current tools

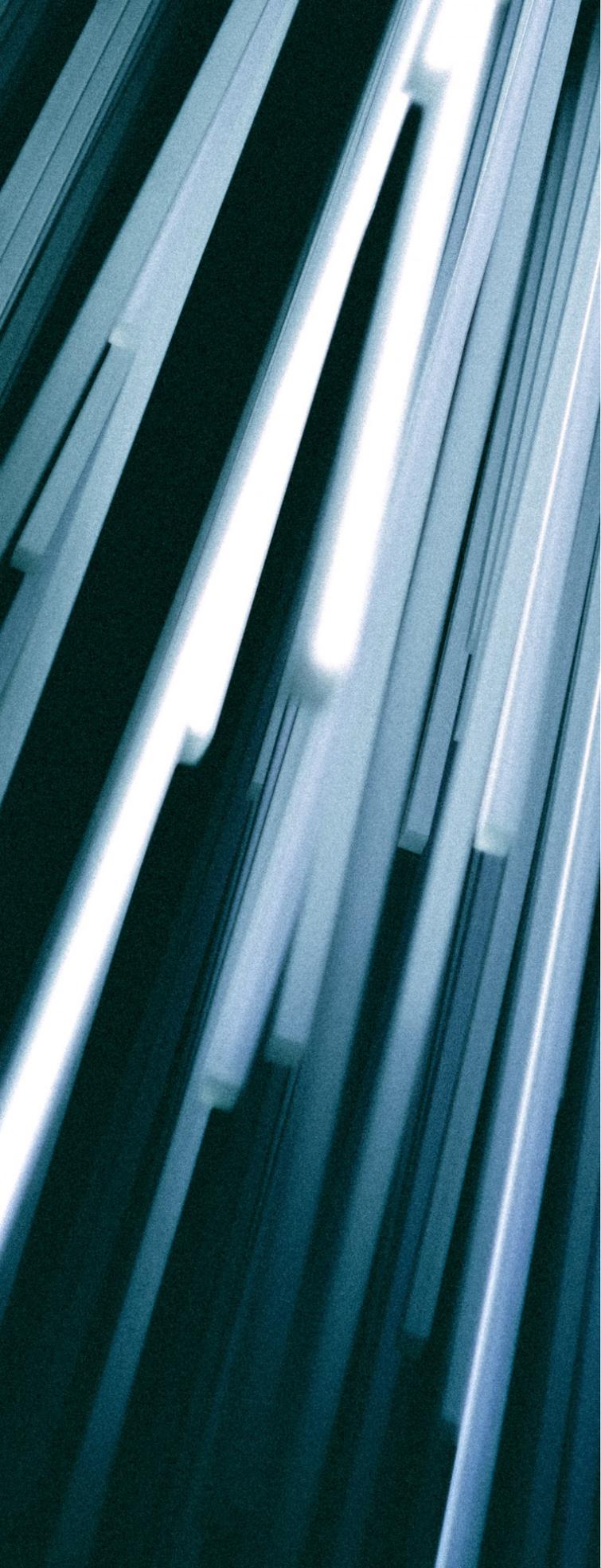
Without a doubt, **optimising and streamlining workflows** are every business' main objective when it comes to their IT and software strategy. For over two decades Lesterius **co-creates tailored digital solutions** that do just that.

The Claris platform has been our primary environment since day one, and now allow us to leverage the power of AI like never before. With **Claris FileMaker** we have built hundreds of tailored solutions for Desktop, Web and Mobile. We use **Claris Connect** to integrate automated workflows within existing environments and alongside your current tools.

Whether you want to leverage the capabilities through the use of public API services or train and use your own models, Claris FileMaker is your gateway to AI.

With the native support of Core ML for iOS, you can now run machine learning models on your device for image classification, sentiment analysis, object detection, and more. Core ML delivers blazingly fast performance with easy integration of machine learning models, allowing you to build apps with intelligent new features using little to no lines of code.

Did you know that G2 Crowd ranks the FileMaker Platform #1 in Workplace Innovation Platforms?
https://content.filemaker.com/G2_Fall_2019_WIP_Report



Bringing AI into your business.

The before described real-world use cases illustrate that AI can **transform** some of your organisations' **workflows and processes** and **save valuable time and resources**.

The challenge now is to identify the processes and workflows where AI can be best introduced within your organisations workflows. We are conscious that the vast universe of AI models and applications can be daunting. If your organisation is only on the brink of implementation AI, getting **solid advice** in this initial phase is key.

With more than 20 years of experience assisting small to medium size companies in their **digital transformation** we are able to assist you in determining which technology and innovation makes sense for your organisation. And which ones don't.

Let's discover together how AI can help you amplify the way you work.

Get in touch via www.lesterius.com



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